





SURFACE OBSERVATION **CLIMATIC SUMMARIES**

FOR

SPANGDAHLEM AB, GERMANY

Prepared by

OL-A, USAFETAC ASHEVILLE, NORTH CAROLINA 28801-2723

NOVEMBER 1990



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USAF **ENVIRONMENTAL TECHNICAL APPLICATIONS CENTER**

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PREFACE

EFFECTIVE 1 JULY 1988, THE SURFACE OBSERVATION CLIMATIC SUMMARIES (SOCS) REPLACED TWO OTHER USAFETAC PRODUCTS OF LONG STANDING: THE RUSSWO (REVISED UNIFORM SUMMARY OF SURFACE WEATHER OBSERVATIONS) AND LISOCS (LIMITED SURFACE OBSERVATION CLIMATIC SUMMARY). RUSSWOS AND LISOCS NOW IN EXISTENCE WILL CONTINUE TO BE USED UNTIL THEY ARE EVENTUALLY REPLACED BY SOCS.

THIS PRODUCT HAS BEEN ISSUED IN OTHER FORMS UNDER SEVERAL OTHER NAMES. IT WAS INTRODUCED IN THE EARLY 1940'S AS THE "SFCSUM," OR "SURFACE SUMMARY." THE ORIGINAL "USSWO," OR "UNIFORM SUMMARY OF SURFACE WEATHER OBSERVATIONS," DEBUTED IN 1946. THE USSWO GRADUALLY EVOLVED INTO THE "RUSSWO" AND THE "LISCCS." IT FINALLY BECAME THE NEW "SURFACE OBSERVATION CLIMATIC SUMMARIES" OR "SOCS" IN JULY 1988.

THE SOCS (LIKE ITS PREDECESSORS) IS PREPARED BY USAFETAC'S OPERATING LOCATION A AT ASHEVILLE, NC 28801-2723. HERE, CLIMATOLOGISTS USE STATE-OF-THE-ART COMPUTER TECHNOLOGY TO SUMMARIZE WEATHER OBSERVATIONS COLLECTED FROM SELECTED MILITARY, CIVILIAN, AND FOREIGN REPORTING STATIONS. SUMMARIES ARE PREPARED FROM DATA THAT HAS BEEN COLLECTED, QUALITY-CONTROLLED, AND STORED IN OL-A'S WORLDWIDE SURFACE WEATHER OBSERVATION DATABASE.

ALTHOUGH PREVIOUS VERSIONS OF THIS PRODUCT ONLY OFFERED SIX PARTS, SOCS PROVIDES EIGHT (A-H). THE ADDITIONS ARE THE CROSSWIND AND HEATING-COOLING DEGREE DAY SUMMARIES. PRECEDING EACH PART IS A BRIEF DISCUSSION OF THAT PARTICULAR PART, A DESCRIPTION OF THE DATA, AND AN EXPLANATION OF HOW THE DATA IS PRESENTED.

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*** NOTE: THE AWS CLIMATIC BRIEF IS ATTACHED AT THE END OF THE SOCS ***

VI

INTRODUCTION

STATION PERIOD OF RECORD.

HOURLY OBSERVATIONS: JAN 80 - DEC 89 (AIRWAYS).

SUMMARY OF DAY DATA: MAY 53 - FEB 90 (FULL TIME).

HOURS SUMMARIZED: 0000 LST THROUGH 2300 LST.

DATA SOURCES. THESE SUMMARIES ARE COMPILED FROM "HOURLY OBSERVATIONS" AND/ OR SUMMARY OF DAY DATA," DEPENDING ON THE PHENOMENA OR OCCURRENCE BEING SUMMARIZED. THE TWO SOURCES ARE DEPINED IN "TERMS EXPLAINED."

TERMS EXPLAINED:

- BIVARIATE DISTRIBUTION: A BIVARIATE DISTRIBUTION GIVES THE JOINT DISTRIBUTIONS OF TWO RELATED VARIABLES. AN EXAMPLE IS THE BIVARIATE DISTRIBUTION OF CEILING AND VISIBILITIES IN PART D. EACH ROW AND EACH COLUMN OF A BIVARIATE DISTRIBUTION IS A FREQUENCY DISTRIBUTION. JOINT FREQUENCIES ARE FOUND AT THE ROW-COLUMN INTERSECTIONS.
- HOURLY OBSERVATIONS: ALL RECORD OR RECORD-SPECIAL OBSERVATIONS ON AWS FORMS 10/10A (OR EQUIVALENT) AT SCHEDULED HOURLY INTERVALS.
- SUMMARY OF DAY (SOD) DATA: DATA COMPILED FROM ALL AVAILABLE OBSERVATIONAL SOURCES, INCLUDING HOURLY OBSERVATIONS, SPECIAL OBSERVATIONS, REMARKS, AND ACTUAL "SUMMARY OF DAY" DATA RECORDED IN COLUMNS 44-73 OF AWS FORMS 10/10A (OR EQUIVALENT) FOR ANY GIVEN DAY. NOTE: EXTREMES OCCURRING DURING NON-OPERATIONAL HOURS AND/OR DAYS ARE NOT REFLECTED IN THESE SUMMARIES.
- MEAN: THE SUM OF ALL THE VALUES DIVIDED BY THE NUMBER OF VALUES.
- MEASURABLE AMOUNT: ANY PRECIPITATION OR SNOWFALL AMOUNT GREATER THAN A TRACE.
- MEDIAN: THE MIDDLE VALUE WHEN THE VALUES ARE IN ASCENDING ORDER. IF THE NUMBER OF VALUES IS EVEN, THE MEDIAN IS HALFWAY BETWEEN THE TWO MIDDLE VALUES.
- PERCENT OCCURRENCE FREQUENCY (POF): IN STATISTICS, FREQUENCY IS THE NUMBER OF TIMES A GIVEN COUNT OR EVENT OCCURS. IN THE SOCS, THIS IS EXPRESSED AS THE PERCENT OCCURRENCE FREQUENCY (POF), WHERE THE FREQUENCY (NUMBER OF OCCURRENCES) IS GIVEN AS A PERCENT OF ALL POSSIBLE OCCURRENCES IN THE SAMPLE (PERIOD SUMMARIZED). FOR EXAMPLE, IF SNOW FELL ON 5 OUT OF 100 DAYS WE COULD EXPRESS THE "PERCENT OCCURRENCE FREQUENCY" OF SNOW AS 5 PERCENT OVER THE 100-DAY PERIOD. MAY BE USED INTERCHANGEABLY WITH "PERCENT FREQUENCY OF OCCURRENCE."

PERIOD OF RECORD: THE SIZE OF THE OBSERVATIONAL DATA SAMPLE, IN YEARS.

PRECIPITATION: A TERM THAT INCLUDES BOTH LIQUID PRECIPITATION AND WATER EQUIVALENT.

STANDARD DEVIATION: A MEASURE OF DISPERSION ON THE VARIABILITY OF THE QUANTITY CONCERNED ABOUT ITS ARITHMETIC MEAN. THE LARGER THE STANDARD DEVIATION, THE GREATER THE VARIABILITY.

TIME CONVENTIONS: ALL TIMES IN THE SOCS ARE EXPRESSED IN LOCAL STANDARD TIME (LST). USERS SHOULD MAKE ADJUSTMENTS FOR DAYLIGHT SAVING TIMES IN THEIR AREAS. IN SUMMARIES THAT SHOW DIURNAL VARIATIONS, THE DATA IS SUMMARIZED USING THE FOLLOWING STANDARD 3-HOUR PERIODS (ALL LST):

0000-0200	1200-1400
0300-0500	1500-1700
0600-0800	1800-2000
0900-1100	2100-2300

NOTE 1. DURING PART TIME PERIODS, THE FIRST AND LAST 3-HOUR PERIODS MAY HAVE SIGNIFICANT SHORTFALLS IN OBSERVATION COUNTS.

ABBREVIATIONS USED:

AMT	AMOUNT	. LT	LESS THAN
ann	annual	M	METER
BARO	BAROMETER	MB	MILLIBAR
C	CENTIGRADE (CELSIUS)	MPS	meters per second
DEG	DEGREE	MSL	mean sea level
DB	DRY BULB TEMPERATURE	MEAS	MEASURABLE
DP	DEW POINT TEMPERATURE	NO.	NUMBER
EQ	EQUAL	OBS	OBSERVATION
F	FAHRENHEIT	OBST	OBSTRUCTION
FRZG	FREEZING	POF	PERCENT OCCURRENCE FREQUENCY
FT	FEET	PRECIP	PRECIPITATION
GE	GREATER THAN OR EQUAL TO	SD	STANDARD DEVIFTION
GMT	GREENWICH MEAN TIME	SOD	SUMMARY OF DAY
GT	GREATER THAN	TEMP	TEMPERATURE
HG	INCHES OF MERCURY	TSTM	THUNDERSTORM
HT	HEIGHT	VSBY	VISIBILITY
KTS	KNOTS	vsn	VISION
LE	LESS THAN OR EQUAL TO	WB	WET BULB TEMPERATURE
LST	LOCAL STANDARD TIME	WBAN	AWS FORM 10/10A
		UTC	*COORDINATED UNIVERSAL TIME

SUMMARY DESCRIPTION: A BRIEF DESCRIPTION OF THE DATA PRECEDES EACH PART IN THE SOCS.

NOTE: OL-A/USAFETAC DERIVES STATION LATITUDE/LONGITUDE COORDINATES AND AIRFIELD ELEVATION DATA FROM THE AWS MASTER STATION CATALOG. THIS INFORMATION IS PRESENTED ON THE AWS CLIMATIC BRIEF FOR EACH STATION. THE STATION DATA MAY DIFFER FROM INFORMATION CONTAINED IN THE SOCS STATION HISTORY (DATA SUPPLIED BY AWS UNITS). THE STATION DATA MAY ALSO VARY FROM DATA PRESENTED IN DOD FLIGHT INFORMATION PUBLICATIONS (FLIP).

^{*} UTC REPLACED GMT ON 1 AUGUST 1988

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4	Same		Same	Mar		Jun		Same	Same	Same	1170	24
5	Same		Same	Jul	-	Oct	68	Same	Same	1196	1169	24
6 7	Same Same	ĺ	Same Same	Nov Feb		Jan Mar		Same Same	Same Same	Same Same	Same Same	12 24
8	Same		Same	Apr		Jun		Same	Same	Same	Same	14
9	Same		Same	Jul	69	Nov	69	Same	Same	Same	Same	21
10	Same		Same	Dec		Jun		Same	Same	Same	Same	24
11 12	Same Same		Same Same	Jul Nov		Oct Dec		Same Same	Same Same	Same Same	Same Same	10 24
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		200.110.		1		SMITTE	ır i	RECORDER	GROUND	11. (1)	Dibon 101	CIPEIO
1	May 53	Atop BaseOps bldg		A	W/G	4Q-1		ML204B	68 ft			
2	Apr 55	On roof of rnwy ROS		1	ame			Same	21 ft			
3	Mar 56 Mar 58	Atop remote ROS Atop control tower			ame			Same	25 ft 90 ft			
5	Jul 59	On platform atop ROS		1 -	ame		1 1	Same	20 ft			
6	Mar 61	On roof of ROS	د مسامه سا	. 1	ame	40 44		Same	50 ft			
7	Mar 62	500' fm ctrlin,1000'f rnwy 23				MQ-11		RO-2	13 ft			
8	Oct 63	1. 500' fm ctr,1000' of rnwy 23	_		N/G	MQ-20	1	RO-362	Same			
		2. 500' fm ctr,400' f	m td pt of	: s	ane			İ	Same			
9	Feb 78	rnwy 05			ame			Same	7 ft			
_	E-01/0	2. Same		"	-aule		'	Jaille	22 ft			
10	Jan 88	1. Same		i i	ame			Same	7 ft			
	li	2. Same		S	ame				22 ft			
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PPPPP	PPP	AAA	AAA	RRRR	RRRR	TTTTTTTTT	AAA	AAA
PPPPP	PPPP	AAAA	AAAA	RRRR	RRRRR	TTTTTTTTT	AAAA	AAAA
PP	PP	AA	AA	RR	RR	TT	AA	AA
PP	PP	AA	AA	RR	RR	TT	AA	AA
PPPPP	PPPP	AA	AA	RRRR	RRRRR	TT	AA	AA
PPPPP	PPP	AAAAA	AAAAA	RRRR	RRRR	TT	AAAAA	AAAAA
PP		AAAAA	AAAAA	RR	RR	TT	ааааа	AAAAA
PP		AA	AA	RR	RR	TT	AA	AA
PP		AA	AA	RR	RR	TT	AA	AA
PP		AA	AA	RR	RR	TT	AA	AA

PART A

ATMOSPHERIC PHENOMENA SUMMARIES

THIS PART SUMMARIZES SPECIFIED ATMOSPHERIC PHENOMENA IN CATEGORIES AS FOLLOWS:

THUNDERSTORMS: ALL REPORTED OCCURRENCES OF THUNDERSTORMS, TORNADOES, AND WATERSPOUTS.

LIQUID PRECIPITATION: RAIN OR DRIZZLE FALLING TO THE GROUND BUT NOT FREEZING.

FREEZING PRECIPITATION: FREEZING RAIN OR FREEZING DRIZZLE (GLAZE).

FROZEN PRECIPITATION: SNOW, SNOW PELLETS, SLEET, SNOW GRAINS, ICE CRYSTALS, ICE PELLETS. IN JANUARY 1968, SNOW PELLETS BECAME KNOWN AS SMALL HAIL.

HAIL: ALL OCCURRENCES OF HAIL.

ALL PRECIPITATION: INCLUDES ALL OBSERVATIONS REPORTING PRECIPITATION. BECAUSE MORE THAN ONE TYPE OF PRECIPITATION MAY BE INCLUDED IN THE SAME OBSERVATION, THE SUM OF PERCENTAGES IN THE INDIVIDUAL CATEGORIES MAY EXCEED THE PERCENTAGES IN THIS CATEGORY.

FOG: INCLUDES ALL REPORTED FOG, ICE FOG, AND GROUND FOG.

SMOKE AND/OR HAZE: SMOKE, HAZE, OR COMBINATIONS OF THE TWO.

BLOWING SNOW: ALL REPORTS OF BLOWING SNOW, INCLUDING DRIFTING SNOW, WHEN REPORTED.

DUST AND/OR SAND: DUST, SAND, BLOWING DUST, BLOWING SAND, OR COMBINATIONS OF THESE.

BLOWING SPRAY: THE "ALL OBSTRUCTIONS TO VISION" CATEGORY ACCOUNTS FOR BLOWING SPRAY, IF AND AS REPORTED.

ALL OBSTRUCTIONS TO VISION: THIS CATEGORY INCLUDES ALL REPORTS OF OBSTRUCTIONS TO VISION. SINCE THE OCCURRENCE OF MORE THAN ONE OBSTRUCTION TO VISION MAY BE REPORTED IN THE SAME OBSERVATION, THE SUM OF THE PERCENTAGES IN THE INDIVIDUAL CATEGORIES MAY EXCEED THE PERCENTAGES IN THIS CATEGORY.

SPECIFIED PHENOMENA--PERCENT OCCURRENCE FREQUENCY.

THESE TABLES GIVE THE PERCENT OCCURRENCE FREQUENCY (POF) FOR THE ATMOSPHERIC PHENOMENA SHOWN. THE DATA WAS TAKEN FROM HOURLY OBSERVATIONS ONLY, AND IS SUMMARIZED AS FOLLOWS:

- BY EIGHT 3-HOUR STANDARD TIME PERIODS FOR EACH MONTH (ALL YEARS COMBINED).
- BY MONTH (ALL YEARS AND ALL HOURS COMBINED).
- BY YEAR (ALL YEARS AND ALL HOURS COMBINED).

A - 1 - 2

- SPECIFIED PHENOMENA--PERCENT OCCURRENCE FREQUENCY (POF).
 THIS TABLE IS THE ONLY ONE IN PART A THAT IS PRODUCED FROM SUMMARY OF DAY DATA. DATA IS SUMMARIZED MONTHLY AND ANNUALLY FOR ALL YEARS COMBINED.
- THUNDERSTORMS--PERCENT OCCURRENCE FREQUENCY.

 THIS TABLE GIVES THE PERCENT OCCURRENCE FREQUENCY OF THUNDERSTORMS REPORTED ON
 THE HOURLY OBSERVATION. DATA IS SUMMARIZED SAME AS FOR FIRST TABLE IN THIS PART.
- SPECIFIED PHENOMENA VS WIND DIRECTION--PERCENT OCCURRENCE FREQUENCY.

 THESE TABLES INCLUDE SUMMARY OF MONTH FOR ALL HOURS AND YEARS COMBINED. WIND DIRECTION CATEGORIES ARE AS SPECIFIED BY THE LOCAL WEATHER STATION.
- NOTE 1: REPORTING PRACTICES HAVE CHANGED WITH TIME. METAR AND SYNOPTIC REPORTING STATIONS RECORD (ON AWS FORMS 10/10A) AND TRANSMIT LONGLINE ONLY THE HIGHEST ORDER ATMOSPHERIC PHENOMENA THAT AFFECTS VISIBILITY. METAR STATIONS STARTED THIS PROCEDURE IN JANUARY 1968, BUT SYNOPTIC STATIONS ALWAYS DID IT THAT WAY. IN JANUARY 1970, METAR STATIONS STARTED RECORDING ALL ATMOSPHERIC PHENOMENA THAT AFFECTED VISIBILITY, BUT CONTINUED TO TRANSMIT ONLY THE HIGHEST ORDER. FOR EXAMPLE, IF THE RECORDED OBSERVATION INCLUDED RAIN, FOG AND HAZE, ONLY THE RAIN WAS TRANSMITTED. BECAUSE OF THESE PROCEDURES, THE USAFFTAC DATABASE WOULD SHOW ONLY RAIN AS AN OBSTRUCTION. THEREFORE, THE OBSTRUCTION TO VISION (AND TO A LESSER EXTENT, PRECIPITATION) SUMMARIES FOR METAR AND SYNOPTIC STATIONS ARE HIGHLY QUESTIONABLE.
- NOTE 2: FOREIGN METAR REPORTING STATIONS FREQUENTLY DO NOT TRANSMIT OBSTRUCTIONS TO VISION WHEN VISIBILITIES EXCEED 1000 METERS.
- NOTE 3: A VALUE OF ".O" IN ANY SUMMARY REPRESENTS ONE OR MORE OCCURRENCES THAT, IN AGGREGATE, AMOUNT TO LESS THAN .O5 PERCENT.
- NOTE 4: DURING PART TIME PERIODS, THESE TABLES MAY NOT ACCURATELY REFLECT NIGHTTIME AND/OR WEEKEND OCCURRENCES OF CERTAIN PHENOMENA.

PERCENTAGE FREQUENCY OF HOURS WITH VARIOUS ATMOSPHERIC PHENOMENA FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: JAN HOURS TSTMS LIQUID FREEZ FROZEN HAIL ALL FOG SMOKE BLOWING DUST ALL TOTAL SNOW &/OR OBST SAND TO VSN PRECIP PRECIP PRECIP PRECIP s/OR (LST) NO. OF HAZE OBS 00-02 17.7 1.0 15.5 34.1 28.7 1.7 64.6 917 .8 20.4 12.8 36.0 30.8 67.8 921 03-05 2.8 .1 06-08 20.6 1.3 67.3 3.5 12.3 36.4 29.7 924 09-11 18.5 14.2 35.1 31.2 3.1 69.4 12-14 17.1 1.1 15.8 34.0 23.9 7.8 65.7 924 15-17 17.3 30.8 19.9 10.2 .3 13.2 60.9 924 18-20 .1 18.4 30.8 21.1 .3 12.1 7.4 59.4 918 19.7 .7 21-23 12.9 33.2 22.5 5.3 61.1 918 ALL HOURS .0 18.7 1.5 13.6 33.8 26.0 4.7 64.5 7370 MONTH: FEB 00-02 12.0 .1 10.5 22.6 25.4 9.1 03-05 11.0 11.5 .1 22.6 28.2 9.3 60.1 849 12.0 06-08 .1 11.4 23.6 32.4 9.0 64.9 849 09-11 11.4 .4 14.7 26.5 29.4 14.6 70.6 849 12-14 13.4 . 4 11.7 25.4 17.1 19.1 61.6 849 15-17 11.4 9.0 20.6 13.1 19.0 52.7 .2 18-20 11.3 11.0 22.3 15.3 15.7 53.2 849 21-23 12.6 10.1 23.1 19.0 10.4 52.4 849 ALL HOURS 11.9 .2 11.2 .0 23.3 22.5 13.3 59.1 6792

PERCENTAGE FREQUENCY OF HOURS WITH VARIOUS ATMOSPHERIC PHENOMENA FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: MAR HOURS TSTMS LIQUID FREEZ FROZEN HAIL ALL FOG SMOKE BLOWING DUST ALL TOTAL PRECIP PRECIP PRECIP PRECIP (LST) &/OR SNOW &/OR OBST NO. OF HAZE SAND TO VSN OBS 5.1 00-02 17.2 22.3 18.6 03-05 18.1 7.3 25.4 25.9 6.0 57.3 930 06-08 20.3 8.1 28.4 34.8 5.8 69.0 930 09-11 27.4 12.3 19.5 8.0 26.2 65.9 930 12-14 18.8 5.2 24.0 9.6 16.8 50.3 930 15-17 .1 18.5 22.9 15.3 4.4 4.5 42.7 930 18-20 .3 19.8 3.1 23.0 6.5 12.4 929 21-23 16.5 .3 2.7 19.5 10.9 6.5 36.8 930 ALL .1 18.6 24.1 17.1 10.1 HOURS .1 5.5 51.4 7439 MONTH: APR 00-02 l .1 12.8 2.7 15.4 12.3 2.8 30.6 900 03-05 19.9 20.7 900 15.7 4.2 2.2 42.8 06-08 14.9 4.1 19.0 31.3 55.4 900 5.1 09-11 13.6 4.6 18.1 13.1 41.0 900 12-14 .2 15.2 4.2 .1 19.6 4.0 6.1 29.7 900 15-17 .1 15.9 3.6 19.4 3.8 5.6 28.8 900 .4 15.7 18-20 3.0 18.7 4.8 28.6 900 5.1 21-23 .3 13.7 2.1 15.8 7.0 2.8 25.6 900 ALL HOURS .2 14.7 3.6 .0 18.2 12.1 35.3 7200

PERCENTAGE FREQUENCY OF HOURS WITH VARIOUS ATMOSPHERIC PHENOMENA FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: MAY HOURS TSTMS LIQUID FREEZ FROZEN HAIL ALL FOG SMOKE BLOWING DUST ALL TOTAL (LST) PRECIP &/OR PRECIP PRECIP PRECIP SNOW &/OR OBST NO. OF HAZE SAND TO VSN OBS 00-02 | .1 12.3 12.3 12.8 1.0 26.0 930 .1 12.7 .8 03-05 12.7 24.3 37.7 930 27.8 06-08 .1 15.7 15.7 3.2 46.8 930 09-11 .1 14.3 14.3 8.9 6.7 29.9 930 12-14 .5 14.2 14.2 3.0 20.8 930 3.5 15-17 1.4 14.6 14.6 1.8 2.4 18.8 930 18-20 2.5 15.1 .1 15.2 2.0 2.5 19.7 930 21-23 .8 12.9 12.9 4.9 1.0 18.8 ALL .7 HOURS .0 14.0 10.7 14.0 2.6 27.3 7440 MONTH: JUN 00-02 l 1.7 10.2 10.2 12.3 1.3 23.9 900 03-05 .9 13.7 13.7 30.8 1.4 45.9 900 06-08 11.8 33.2 11.8 4.9 49.9 900 .3 11.7 09-11 11.7 10.7 28.0 900 12-14 1.1 12.6 12.6 1.4 4.3 18.3 900 15-17 2.7 14.0 14.0 1.3 3.9 19.2 900 18-20 2.2 12.3 12.3 2.3 4.0 18.7 900 21-23 1.9 10.4 10.4 5.0 3.1 18.6 900 ALL HOURS | 1.3 12.1 12.1 12.1 27.8 7200

PERCENTAGE FREQUENCY OF HOURS WITH VARIOUS ATMOSPHERIC PHENOMENA FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: JUL HOURS TSTMS LIQUID FREEZ FROZEN HAIL ALL FOG SMOKE BLOWING DUST ALL TOTAL PRECIP PRECIP PRECIP PRECIP &/OR SNOW &/OR HAZE SAND NO. OF OBS (LST) OBST SAND TO VSN 840 00-02 .7 8.9 8.9 10.5 1.9 21.3 03-05 .5 9.9 9.9 26.8 .6 37.3 840 .6 12.7 12.7 28.8 45.1 858 06-08 3.6 09-11 .2 10.5 10.5 7.9 7.0 25.4 858 .9 10.8 10.8 .5 15.5 12-14 4.2 858 .2 1.5 8.6 15-17 8.6 2.2 11.1 858 2.3 7.9 13.3 18-20 7.9 1.6 3.7 856 21-23 1.3 8.0 8.0 4.1 3.5 15.7 849 ALL 1.0 9.7 HOURS 9.7 10.0 3.4 23.1 6817 MONTH: AUG 00-02 .2 7.4 7.4 15.7 1.6 24.6 837 1.0 9.0 03-05 9.0 27.2 1.6 37.8 837 06-08 9.3 37.6 51.1 .1 9.3 4.2 837 09-11 .2 9.0 9.0 14.2 9.4 32.6 837 12-14 .5 6.9 6.9 3.6 5.1 15.7 837 15-17 .5 7.9 7.9 2.3 4.3 14.5 837 .8 18-20 8.8 8.8 3.2 2.7 14.8 837 1.2 21-23 7.8 7.8 5.9 1.4 15.1 837 ALL HOURS .6 8.3 8.3 13.7 3.8 25.8 6696

PERCENTAGE FREQUENCY OF HOURS WITH VARIOUS ATMOSPHERIC PHENOMENA FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: SEP HOURS TSTMS LIQUID FREEZ FROZEN HAIL ALL FOG SMOKE BLOWING DUST ALL TOTAL PRECIP (LST) PRECIP PRECIP PRECIP &/OR SNOW &/OR OBST NO. OF HAZE SAND TO VSN OBS 00-02 .5 6.5 6.5 23.0 .7 30.2 810 03-05 .1 8.2 8.2 32.8 .1 41.1 815 06-08 . 4 9.1 9.1 47.0 1.6 57.7 823 12.0 09-11 .2 9.9 9.9 22.5 44.5 825 . 4 12-14 10.7 10.7 4.0 13.1 27.8 825 15-17 .9 12.1 12.1 1.3 8.0 21.4 821 3.3 6.3 18-20 1.4 12.6 12.6 22.2 810 21~23 9.8 9.8 10.7 22.7 2.2 810 ALL HOURS .5 9.9 9.9 18.1 5.5 33.5 6539 MONTH: OCT 00-02 14.4 14.4 32.2 .3 .1 47.0 905 03-05 .1 18.0 18.0 38.2 56.3 910 06-08 21.9 21.9 46.4 .2 68.6 926 4.7 09-11 19.2 .1 19.4 39.1 63.2 930 12-14 17.3 17.3 16.1 10.1 43.5 930 15-17 16.7 16.7 9.4 11.0 37.0 930 18-20 15.1 15.1 14.3 6.8 36.1 930 21-23 15.6 15.6 21.4 1.1 38.1 928 ALL .0 17.3 HOURS .0 17.3 27.1 4.3 .0 48.7 7389

PERCENTAGE FREQUENCY OF HOURS WITH VARIOUS ATMOSPHERIC PHENOMENA FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: NOV HOURS TSTMS LIQUID FREEZ FROZEN HAIL ALL FOG SMOKE BLOWING DUST ALL TOTAL (LST) PRECIP PRECIP PRECIP PRECIP &/OR SNOW &/OR OBST NO. OF HAZE SAND TO VSN OBS 00-02 16.2 1.1 20.8 28.7 .6 50.1 16.5 03-05 .1 3.2 19.9 35.6 .3 55.8 871 06-08 19.2 .3 24.3 38.0 .5 62.7 877 4.8 09-11 16.3 .2 21.5 39.2 4.0 64.6 885 5.0 12-14 14.8 5.3 20.1 26.6 5.5 52.2 885 15-17 14.7 5.2 19.9 20.0 7.7 47.6 885 .1 18-20 .1 15.6 .2 4.9 20.9 21.2 1.5 43.6 871 47.1 21-23 17.5 1.0 22.8 23.9 .3 867 .1 4.3 ALL HOURS .0 16.3 .4 4.5 .0 21.3 29.2 2.6 53.0 7011 MONTH: DEC 00-02 19.8 2.3 28.5 26.7 .5 55.7 6.5 03-05 22.6 2.0 6.1 30.7 28.8 .7 60.2 886 06-08 20.4 1.1 7.7 29.3 30.7 .3 60.3 892 09-11 19.3 36.2 .1 1.1 7.4 27.8 2.2 66.2 903 12-14 18.1 9.0 27.2 30.4 4.8 62.4 904 .1 15-17 22.8 .8 7.6 31.1 25.8 62.0 5.1 900 18-20 23.9 1.0 5.4 30.3 24.9 1.5 56.8 870 21-23 21.8 1.7 5.7 29.3 25.6 1.0 56.0 870 ALL HOURS .0 21.1 1.3 6.9 29.3 28.7 2.0 60.0 7105

PERCENTAGE FREQUENCY OF VARIOUS ATMOSPHERIC PHENOMENA FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

			LST TO	UTC: -	ı				HOURS:	ALL		
MONTH	TSTMS	LIQUID PRECIP	FREEZ PRECIP	FROZEN PRECIP	HAIL	ALL PRECIP	FOG	SMOKE &/OR HAZE	BLOWING SNOW	DUST &/OR SAND	ALL OBST TO VSN	TOTAL NO. OF OBS
JAN	.0	18.7	1.5	13.6		33.8	26.0	4.7	.0	• • • • • • •	64.5	7370
FEB		11.9	.2	11.2	.0	23.3	22.5	13.3			59.1	6792
MAR	.1	18.6	.1	5.5		24.1	17.1	10.1			51.4	7439
APR	.2	14.7		3.6	.0	18.2	12.1	4.9			35.3	7200
MAY	.7	14.0			.0	14.0	10.7	2.6			27.3	7440
JUN	1.3	12.1				12.1	12.1	3.6			27.8	7200
JUL	1.0	9.7				9.7	10.0	3.4			23.1	6817
AUG	.6	8.3				8.3	13.7	3.8			25.8	6696
SEP	.5	9.9				9.9	18.1	5.5			33.5	6539
ост	.0	17.3		.0		17.3	27.1	4.3		.0	48.7	7389
NOV	.0	16.3	.4	4.5	.0	21.3	29.2	2.6			53.0	7011
DEC	.0	21.1	1.3	6.9		29.3	28.7	2.0			60.0	7105
ANNUAL	.4	14.5	.3	3.8	.0	18.6	19.0	5.1	.0	.0	42.6	84998

PERCENTAGE FREQUENCY OF DAYS WITH VARIOUS ATMOSPHERIC PHENOMENA FROM SUMMARY OF DAY DATA

STATION NUMBER: 106070 STATION NAME: SPANGDAHLEM AB GERMANY PERIOD OF RECORD: 5305-9002 LST TO UTC: -01 MONTH: ALL HOURS: ALL

			LST TO U	ic: -01					MONTH: ALL	HOURS	: Alli	
MONTH	TSTMS	LIQUID PRECIP	FREEZ PRECIP	FROZEN PRECIP	HAIL	ALL PRECIP	FOG	SMOKE &/OR HAZE	BLOWING SNOW	DUST &/OR SAND	ALL OBST TO VSN	TOTAL NO. OF OBS
JAN	9	54.5	7.5	43.4	.6	76.0	75.2	45.5	.6		96.4	1137
FEB	.7	46.9	3.1	38.3	.7	66.7	68.1	55.5	.3		94.2	1045
MAR	1.9	54.2	.3	27.1	1.3	65.8	60.9	56.6	.1		93.7	1116
APR	3.7	56.5	.1	15.5	2.6	61.0	52.4	48.3			84.5	1052
MAY	12.3	62.1		1.3	2.1	62.1	50.4	41.0		.1	82.2	1120
JUN	15.8	60.4		.2	1.6	60.4	56.9	44.3			83.3	1094
JUL	14.6	53.1			.7	53.1	54.8	44.7			80.4	1104
AUG	12.2	54.5			.4	54.5	61.4	44.2			83.1	1104
SEP	6.7	50.1		.1	.3	50.1	70.3	53.3			88.2	1065
ост	1.5	54.9		1.4	.2	55.2	77.1	50.2			92.5	1131
NOV	.7	62.2	2.5	18.0	.1	69.0	75.9	43.1			95.6	1075
DEC	.5	60.2	7.2	33.1	.5	73.4	75.8	37.9			95.7	1129
ANNUAL	6.0	55.9	1.7	14.9	.9	62.3	65.0	47.0	.1	.0	89.2	13172

PERCENTAGE FREQUENCY OF OCCURRENCE OF THUNDERSTORMS FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 HOURS | JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC (LST) 00-02 .1 .1 1.7 .7 .2 .5 1.0 .1 03-05 .1 .9 .5 .1 06-08 .6 .1 .2 09-11 .1 .3 .2 .2 .1 .5 .4 12-14 .2 . 5 1.1 .9 1.5 .5 .1 1.4 .9 15-17 .1 2.7 18-20 .3 . 4 2.5 .8 .1 2.2 2.3 1.4 •1 .1 21-23 .3 .8 1.9 1.3 1.2 .4 .1 ALL HOURS .1 .2 .7 1.3 .0 1.0 .6 .5 .0 .0 TOTAL OBS 7370 6792 7439 7200 7440 7200 6817 6696 6539 7389 7011 7105

PERCENTAGE FREQUENCY OF OCCURRENCES OF ATMOSPHERIC PHENOMENA VERSUS WIND DIRECTION FROM HOURLY OBSERVATIONS

TSTMS LIQUID 4.1 .4 1.9 .5 1.1 7.0 85.0 13 PRECIP FREEZING 22.5 3.6 7.2 7.2 .9 58.6 15 PRECIP FROZEN 6.2 1.3 6.9 19.6 11.2 3.1 51.7 96 PRECIP FOG 25.5 .1 3.2 14.3 20.4 2.0 34.6 19.6 FOG WITH VIS 23.4 .1 2.6 15.9 21.4 2.3 34.2 14.5 GE 1/2 MILES	STATION NUMBER	R: 106070	STATION NA				PERIOD OF RE MONTH: JAN	HOURS: ALL	
TSTMS LIQUID	PHENOMENA	CALM		300 - 029	030 - 079	080 - 139	140 - 209	210 - 299	NO OF OBS
PRECIP PREZING PRECIP FROZEN 6.2 1.3 6.9 19.6 11.2 3.1 51.7 90 PRECIP FOG 25.5 .1 3.2 14.3 20.4 2.0 34.6 19.6 FOG WITH VIS GE 1/2 MILES	TSTMS		• • • • • • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • •	••••••		1
PRECIP FROZEN 6.2 1.3 6.9 19.6 11.2 3.1 51.7 90 PRECIP FOG 25.5 .1 3.2 14.3 20.4 2.0 34.6 19.6 FOG WITH VIS 23.4 .1 2.6 15.9 21.4 2.3 34.2 14.9 GE 1/2 MILES	-	4.1	.4	1.9	.5		7.0	85.0	1379
PRECIP FOG 25.5 .1 3.2 14.3 20.4 2.0 34.6 19.7 FOG WITH VIS 23.4 .1 2.6 15.9 21.4 2.3 34.2 14.9 GE 1/2 MILES		22.5		3.6	7.2	7.2	.9	58.6	111
FOG WITH VIS 23.4 .1 2.6 15.9 21.4 2.3 34.2 149 GE 1/2 MILES		6.2	1.3	6.9	19.6	11.2	3.1	51.7	900
GE 1/2 MILES	FOG	25.5	.1	3.2	14.3	20.4	2.0	34.6	1915
TOTAL ORS 944 34 443 900 823 285 3941		23.4	.1	2.6	15.9	21.4	2.3	34.2	1452
20110 200 211 21 21	TOTAL OBS	944	34	443	900	823	285	3941	7370

					M	ONTH: FEB	HOURS: ALL	
TSTMS		••••••			••••••	••••••	•••••	••••••
LIQUID PRECIP	3.3	1.9	4.0	4.2	6.4	6.4	73.8	809
FREEZING PRECIP				15.4	38.5		46.2	13
FROZEN PRECIP	15.9	1.0	19.2	32.2	5.8	1.7	24.3	709
POG	22.8		6.2	21.5	18.3	2.3	28.9	1527
FOG WITH VIS GE 1/2 MILES	22.0		5.9	25.9	21.1	2.1	22.9	1218
TOTAL OBS	878	52	533	1598	1366	194	2171	6792

PERCENTAGE FREQUENCY OF OCCURRENCES OF ATMOSPHERIC PHENOMENA VERSUS WIND DIRECTION FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: MAR HOURS: ALL PHENOMENA | CALM VARIABLE 300 - 029 030 - 079 080 - 139 140 - 209 210 - 299 NO OF OBS TSTMS 50.0 50.0 4 6.7 1.4 3.4 10.9 1380 LIQUID 4.1 .6 72.9 PRECIP 100.0 FREEZING PRECIP 5.2 .6 14.4 3.7 6.6 4.0 65.5 348 FROZEN PRECIP 28.7 .2 8.8 FOG 20.2 10.8 1.9 29.4 1284 .2 FOG WITH VIS 28.3 8.7 20.0 11.0 2.1 29.8 1202 GE 1/2 MILES

TOTAL OBS | 1113 53 702 864 790 460 3457 7439

					r	ONTH: APR	HOURS: ALL	
TSTMS		• • • • • • • • • • • •	•••••••	9.1		18.2	72.7	11
LIQUID PRECIP	8.9	1.2	15.0	8.6	4.7	10.2	51.4	1048
FREEZING PRECIP								
FROZEN PRECIP	12.2	1.0	33.7	9.7	2.6	3.6	37.2	196
FOG	29.8	.2	15.9	19.8	10.4	1.4	22.5	873
FOG WITH VIS GE 1/2 MILES	28.7	.2	16.2	20.6	10.3	1.4	22.5	832
TOTAL OBS	1179	72	1213	1298	955	481	2002	7200

OPERATING LOCATION "A" PERCENTAGE FREQUENCY OF OCCURRENCES OF ATMOSPHERIC PHENOMENA USAFETAC, ASHEVILLE NC VERSUS WIND DIRECTION FROM HOURLY OBSERVATIONS

		LST TO UTO				MONTH: MAY	HOURS: ALL	
PHENOMENA	CALM	VARIABLE	300 - 029	030 - 079	080 - 139	140 - 209	210 - 299	NO OF OB
TSTMS	1.9	• • • • • • • • • • • • •	13.5	11.5			38.5	52
LIQUID PRECIP	12.5	.8	13.9	12.2	5.2	7.2	48.2	1006
FREEZING PRECIP								
FROZEN PRECIP								
FOG	32.4	.1	9.4	14.6	10.7	3.8	29.1	797
FOG WITH VIS	32.2	.1	9.7	14.6	9.8	3.8	29.8	765
GE 1/2 MILES								
	1491	48	884	1309	990	455	2263	744
	1491	48	884	1309	•••••	455 40nth: Jun	• • • • • • • • • • • • • • • • • • • •	744
TOTAL OBS		1.0			4	• • • • • • • • • • • • • • • • • • • •	Hours: ALL	744
TOTAL OBS TSTMS	9.3		27.8	7.2	9.3	40NTH: JUN 7.2	HOURS: ALL	
GE 1/2 MILES TOTAL OBS TSTMS LIQUID PRECIP FREEZING PRECIP	9.3	1.0	27.8	7.2	9.3	40NTH: JUN 7.2	HOURS: ALL	97
TOTAL OBS TSTMS LIQUID PRECIP FREEZING	9.3	1.0	27.8	7.2	9.3	40NTH: JUN 7.2	HOURS: ALL	97
TOTAL OBS TSTMS LIQUID PRECIP FREEZING PRECIP FROZEN PRECIP	9.3	1.0	27.8 13.6	7.2	9.3	40NTH: JUN 7.2	HOURS: ALL 38.1 61.8	97
TOTAL OBS TSTMS LIQUID PRECIP FREEZING PRECIP FREOZEN	9.3	.2	27.8 13.6	7.2 5.8 10.0 10.6	9.3 3.0	7.2 4.0 2.5 2.5	HOURS: ALL 38.1 61.8 32.7 34.0	824

PERCENTAGE FREQUENCY OF OCCURRENCES OF ATMOSPHERIC PHENOMENA VERSUS WIND DIRECTION FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: JUL HOURS: ALL PHENOMENA | CALM VARIABLE 300 - 029 030 - 079 080 - 139 140 - 209 210 - 299 NO OF OBS TSTMS 14.5 11.6 4.3 11.6 50.7 69 5.6 2.9 9.4 4.2 5.0 6.5 66.5 LIQUID 626 PRECIP FREEZING PRECIP FROZEN PRECIP 39.2 .1 14.9 9.2 6.0 1.5 29.1 684 FOG FOG WITH VIS .2 14.0 9.7 6.3 1.5 29.8 38.4 648 GE 1/2 MILES TOTAL OBS | 1274 82 1011 784 692 332 2642 6817

					M	ONTH: AUG	HOURS: ALL	
TSTMS	15.8	• • • • • • • • • • • • • • • • • • • •	13.2	13.2	2.6	5.3	50.0	38
LIQUID PRECIP	8.7	.6	13.3	5.5	6.1	4.4	61.4	526
FREEZING PRECIP								
FROZEN PRECIP								
FOG	42.1	.1	9.8	7.6	8.6	2.0	29.8	927
FOG WITH VIS GE 1/2 MILES	40.8	.1	10.3	7.3	8.8	2.1	30.5	825
TOTAL OBS	1519	52	843	580	630	276	2796	6696

PERCENTAGE FREQUENCY OF OCCURRENCES OF ATMOSPHERIC PHENOMENA VERSUS WIND DIRECTION FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: SEP HOURS: ALL PHENOMENA | CALM VARIABLE 300 - 029 030 - 079 080 - 139 140 - 209 210 - 299 NO OF OBS TSTMS 14.7 8.8 11.8 8.8 11.8 44.1 34 6.4 .8 7.7 11.1 5.0 7.9 61.2 623 LIQUID PRECIP FREEZING PRECIP FROZEN PRECIP FOG 44.2 5.6 13.5 11.8 1.4 23.5 1184 15.4 4.5 11.0 1.5 FOG WITH VIS 44.3 23.3 1008 GE 1/2 MILES TOTAL OBS | 1535 40 541 778 747 348 2550 6539 MONTH: OCT HOURS: ALL •••••• 100.0 1 TSTMS LIQUID 4.8 .5 4.3 4.1 8.3 11.5 66.4 1278 PRECIP FREEZING PRECIP FROZEN PRECIP FOG 30.5 .0 4.8 17.8 16.7 2.3 27.8 2002 .1 4.7 19.3 17.2 FOG WITH VIS 28.7 2.6 27.4 1660 GE 1/2 MILES

OPERATING LOCATION "A" PERCENTAGE FREQUENCY OF OCCURRENCES OF ATMOSPHERIC PHENOMENA USAFETAC, ASHEVILLE NC VERSUS WIND DIRECTION FROM HOURLY OBSERVATIONS

STATION NUMBER	R: 106070	STATION NAM LST TO UTC:		em ab/germany			DD OF RECORD: JAN 80 - DEC 89 I: NOV HOURS: ALL				
PHENOMENA	CALM	VARIABLE	300 - 029	030 - 079	080 - 139	140 - 209	210 - 299	NO OF OBS			
tstms		• • • • • • • • • • • • • • •	••••••	• • • • • • • • • • • • •		• • • • • • • • • • • •	100.0	2			
LIQUID PRECIP	5.9	.9	5.1	1.2	4.5	8.2	74.1	1145			
FREEZING PRECIP	48.1		14.8			7.4	29.6	27			
FROZEN PRECIP	11.3	.7	13.7	24.6	5.8	1.7	42.3	293			
FOG	33.6	.1	4.5	13.5	13.1	3.2	32.1	2044			
FOG WITH VIS GE 1/2 MILES	27.9	.1	4.6	16.1	13.7	3.5	34.1	1560			
TOTAL OBS	1252	33	457	994	886	329	3060	7011			

					м	ONTH: DEC	HOURS: ALL	
TSTMS			• • • • • • • • • • • •	•••••			100.0	2
LIQUID PRECIP	7.6	.7	2.8	2.5	4.5	4.2	77.7	1495
FREEZING PRECIP	28.9				22.2	4.4	44.4	90
FROZEN PRECIP	8.1	1.7	8.8	6.6	17.6	4.9	52.2	408
POG	22.2		4.8	8.4	13.9	4.4	46.3	2038
FOG WITH VIS GE 1/2 MILES	19.4		4.7	10.7	15.2	4.7	45.3	1482
TOTAL OBS	1048	27	451	622	766	267	3923	7104

OPERATING LOCATION "A" PERCENTAGE FREQUENCY OF OCCURRENCES OF ATMOSPHERIC PHENOMENA USAFETAC, ASHEVILLE NC VERSUS WIND DIRECTION FROM HOURLY OBSERVATIONS

STATION NUMBER	ORD: JAN 80) - DEC 89						
PHENOMENA	CALM	VARIABLE	300 - 029	030 - 079	080 - 139	140 - 209	210 - 299	NO OF OBS
TSTMS	8.0	.3	18.0	9.6	8.0	10.3	45.7	311
LIQUID PRECIP	6.6	1.0	7.3	4.5	4.6	7.6	68.3	12139
FREEZING PRECIP	26.1		3.3	4.1	13.5	2.9	50.2	245
FROZEN PRECIP	9.7	1.1	13.7	18.7	9.1	3.0	44.7	2854
FOG	31.0	.1	6.8	14.4	13.5	2.5	31.6	16149
FOG WITH VIS GE 1/2 MILES	29.5	.1	7.0	16.1	13.8	2.6	30.9	13466
TOTAL OBS	14774	663	8562	11652	10175	4105	35066	84997

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PPPPPPPP		AAAAA		RRRRRRRR		199999999	вввввввв	
PPPPP	PPPP	AAAA	AAAA	RRRR	RRRRR	THEFT	BBBBBB	BBBB
PP	PP	AA	AA	RR	RR	TT	BB	BB
PP	PP	AA	AA	RR	RR	TT	BB	BB
PPPPP	PPPP	AA	λλ	RRRR	RRRRR	TT	BBBBBB	BBBB
PPPPP	PPP	AAAAA	AAAAA	RRRR	RRRR	TT	BBBBBB	BBBB
PP		ааааа	AAAAA	RR	RR	TT	BB	ВВ
PP		AA	AA	RR	RR	TT	BB	BB
PP		AA	AA	RR	RR	TT	BBBBBB	BBBB
PP		AA	AA RR		RR	TT	BBBBBBBBB	

PRECIPITATION, SNOWFALL, SNOW DEPTH SUMMARIES

ALL TABLES IN PART B ARE CREATED FROM SUMMARY OF DAY (SOD) DATA.

PERCENT OCCURRENCE FREQUENCY.

THESE TABLES GIVE THE PERCENT OCCURRENCE FREQUENCY OF PRECIPITATION, SNOWFALL AND SNOW DEPTH. DATA IS SUMMARIZED FOR ALL YEARS COMBINED. SUMMARIES INCLUDE THE PERCENT OF DAYS WITH MEASURABLE AMOUNTS, PERCENT OF DAYS WITH NO AMOUNTS, PERCENT OF DAYS WITH SPECIFIED AMOUNTS. SUMMARIES ALSO PROVIDE AN OBSERVATION COUNT. A VALUE OF ".O" INDICATES ONE OR MORE OCCURRENCES THAT, IN AGGREGATE, AMOUNT TO LESS THAN .05 PERCENT.

MONTHLY TOTALS.

THESE TABLES GIVE THE TOTAL MONTHLY PRECIPITATION AND SNOWFALL RESPECTIVELY.
THEY ARE SUMMARIZED BY MONTH FOR ALL YEARS. THE TABLES ALSO GIVE THE GREATEST
AMOUNTS, LEAST AMOUNTS, MEAN, MEDIAN, STANDARD DEVIATIONS, AND TOTAL AVAILABLE
OBSERVATIONS. AN ASTERISK (*) INDICATES A VALUE FOR A MONTH FOR WHICH LESS
THAN 90% OF THE DATA ARE AVAILABLE. AN ASTERISK ALSO DENOTES A YEAR(S) WITH ONE
OR MORE MISSING AND/OR INCOMPLETE MONTHS. INCOMPLETE MONTHS/YEARS ARE NOT INCLUDED
IN STATISTICAL COMPUTATIONS. NOTE: LEAST AMOUNTS ARE DERIVED FROM COMPLETE
MONTHS/YEARS ONLY. ".00" MEANS NO PRECIPITATION FOR THE MONTH, ".0" MEANS NO
SNOWFALL FOR THE MONTH.

DAILY EXTREMES.

THESE TABLES GIVE THE MAXIMUM DAILY REPORTED AMOUNTS (BY INDIVIDUAL YEARMONTH) FOR PRECIPITATION, SNOWFALL, AND SNOW DEPTH, RESPECTIVELY. THEY SHOW THE GREATEST AMOUNTS FOR EACH MONTH AND THE TOTAL NUMBER OF AVAILABLE OBSERVATIONS FOR EACH MONTH AND YEAR. AN ASTERISK (*) INDICATES A MONTH FOR WHICH LESS THAN 90% OF DATA ARE AVAILABLE. AN ASTERISK ALSO DENOTES A YEAR(S) WITH ONE OR MORE MISSING AND/OR INCOMPLETE MONTHS. ".00" MEANS NO PRECIPITATION FOR THE MONTH, ".0" MEANS NO SNOWFALL FOR THE MONTH, AND "0" MEANS NO SNOW DEPTH FOR THE MONTH.

SNOWFALL/SNOW DEPTH--FIRST AND LAST DAYS OF OCCURRENCE BY SNOW YEAR.

THIS SUMMARY GIVES THE FIRST AND LAST OCCURRENCES OF SNOWFALL AND SNOW
DEPTH FOR THE SNOW-YEAR DURING THE PERIOD OF RECORD. FOR THIS SUMMARY, THE
SNOW-YEAR IS CONSIDERED TO RUN FROM 1 AUGUST TO 31 JULY. TABLES SUMMARIZE
THE DATA BY SNOW-YEAR, BY MONTH, AND BY DAY. THE FIRST (OR LAST) ENTRY IN
COLUMN 69 OF AWS FORMS 10/10A (OR EQUIVALENT) AS EITHER A TRACE OR A MEASURABLE
AMOUNT DEFINES THE FIRST (OR LAST) SNOWFALL FOR THE THE YEAR. THE FIRST (OR LAST)
ENTRY IN COLUMN 69 OTHER THAN ".0" OR "TRACE" DEFINES THE FIRST (OR LAST)
MEASURABLE SNOWFALL. FINALLY, THE 1200 GMT ENTRY COLUMN 70 OF AWS FORM 10/10A
(OR EQUIVALENT) DEFINES THE FIRST (OR LAST) OCCURRENCE OF SNOW DEPTH. THE LAST
SNOW DEPTH IS CONSIDERED THE LAST SNOW MELT. THIS SUMMARY IS NOT PROVIDED
WHEN NO SNOWFALL OCCURS DURING THE GIVEN POR.

- NOTE 1. IF THE MINIMUM AMOUNT RECORDED IN THE MONTHLY TOTALS OR DAILY EXTREMES IS A TRACE, THE WORD "TRACE" WILL APPEAR IN THE APPROPRIATE COLUMN.
- NOTE 2. TABLES INCLUDE STATISTICAL DATA ONLY WHEN FIVE (5) OR MORE SETS OF COMPLETE MONTHS ARE AVAILABLE.
- NOTE 3. THE OBSERVATION COUNTS OR THE STATION HISTORY MIGHT PROVIDE CLUES AS TO WHY CERTAIN DATA ARE MISSING. FOR EXAMPLE, ONLY A FEW MISSING OBSERVATIONS MIGHT IMPLY MISSING DATA BECAUSE OF EQUIPMENT MALFUNCTION, BUT MORE THAN SEVERAL MISSING OBSERVATIONS USUALLY MEANS THE STATION IS (OR HAS BEEN) CLOSED.
- NOTE 4. IN DAILY AND MONTHLY AMOUNTS SUMMARIES, THE LAST ENTRY ON THE PAGE GIVES THE GREATEST AMOUNT FOR THE PERIOD OF RECORD.
- NOTE 5. BEFORE JANUARY 1956, SNOWFALL OCCURRENCES IN THE SUMMARY OF DAY INCLUDED HAIL.
- NOTE 6. SNOW DEPTH REPORTING TIMES FOR USAF, NAVY AND CIVIL STATIONS ARE AS FOLLOWS:

MAIN AND MARTONAL WEARUPD SERVICE

AIR FORCE		MAVI AND MATIONAL WEATHER	SERVICE
THROUGH 1945:	0800 LST	THROUGH JUN 1952:	0030 GMT
JAN 1946 TO MAY 1957:	1230 LST	JUN 1952 TO MAY 1957:	1230 GMT
JUN 1957 TO PRESENT:	1200 GMT	JUN 1957 TO PRESENT:	1200 GMT

NOTE 7. 24-HOUR PRECIPITATION (INCLUDING SNOWFALL AND SNOW DEPTH) VALUES DERIVED FROM PART TIME PERIODS MAY NOT REFLECT TRUE 24-HOUR AMOUNTS. RECORDED AMOUNTS FOLLOWING WEEKENDS AND/OR HOLIDAYS FREQUENTLY REPRESENT AMOUNTS MEASURED FOR PERIODS GREATER THAN 24 HOURS. IN ADDITION, 24-HOUR AMOUNTS MAY NOT REPRESENT THE STANDARD CLIMATOLOGICAL 24-HOUR "MIDNIGHT TO MIDNIGHT" AMOUNT. DATA FROM PART TIME PERIODS MAY NOT ACCURATELY REFLECT NIGHTTIME PRECIPITATION EVENTS.

CONVERSIONS:

- 1 INCH = 25.39998 MILLIMETERS

ATD SOROS

- 1 MILLIMETER = .03937 INCHES

PERCENTAGE FREQUENCY OF OCCURRENCE OF PRECIPITATION IN INCHES FROM SUMMARY OF DAY DATA

STATION NUMBER: 106070 STATION NAME: SPANGDAHLEM AB GERMANY PERIOD OF RECORD: 5305-9002 LST TO UTC: -01 MONTH: ALL HOURS: ALL SEP NOV DEC AMOUNTS MAR JUN JUL AUG OCT ANN JAN FEB APR MAY (INCHES) NONE 23.2 32.2 33.9 38.6 37.4 40.1 46.8 44.3 48.2 43.5 31.5 25.7 37.0 TRACE 19.A 20.5 19.6 19.8 17.1 15.6 12.1 13.4 14.2 15.2 19.4 22.0 17.4 .01 6.5 5.5 5.0 4.5 5.7 4.5 4.7 5.6 6.7 5.2 3.7 5.4 4.8 .02-.05 15.4 11.5 13.0 13.7 11.5 9.6 9.8 10.0 8.7 11.4 11.9 12.8 11.6 .06-.10 11.1 9.4 8.2 8.1 7.1 7.8 6.3 5.4 6.0 6.9 8.8 9.1 7.8 .11-.25 15.5 11.6 13.2 10.5 10.6 11.4 9.9 11.2 9.5 9.8 12.5 13.5 11.6 .26-.50 7.0 5.5 7.3 5.8 4.1 7.6 6.9 5.9 5.4 5.6 7.2 7.2 6.3 .51-1.00 2.6 2.1 1.2 1.3 2.7 3.3 3.5 2.4 3.1 2.3 2.4 2.6 2.5 1.01-2.50 .3 .1 .2 .2 . 5 .8 .8 .6 . 5 . 5 . 4 .7 .5 2.51-5.00 .1 .0 5.01-10.00 10.01-20.00 OVER 20.00 DAYS WITH MEAS AMTS 56.9 47.4 46.5 41.6 45.6 44.3 41.1 42.3 37.6 41.3 49.1 52.3 45.6 TOTAL NO. OF OBSERVATIONS | 1140 1045 1116 1102 1078 1108 1097 1055 1062 1117 1080 1124 13124

85

2.14

.84

1.82

1.92

1.29

3.52

TOTAL MONTHLY PRECIPITATION AMOUNTS IN INCHES FROM SUMMARY OF DAY DATA

STATION NAME: SPANGDAHLEM AB GERMANY PERIOD OF RECORD: 5305-9002 STATION NUMBER: 106070 LST TO UTC: -01 MONTH: ALL HOURS: ALL NOV mar apr may jun jul aug sep OCT DEC ANNUAL JAN FEB YEAR 53 * 2.79* 2.37 1.39 1.21 .70 .21 .95 9.62* 1.70 1.73 2.05 2.94 27.81 54 1.12 .93 1.63 2.01 3.22 3.54 4.22 2.72 2.02 .95 2.24 3.47 2.01 1.18 1.32 .99 3.53 22.48 55 2.75 .42 1.60 56 2.51 .46 1.60 1.60 2.76 3.29 5.02 3.30 2.01 1.72 1.12 2.10 27.49 57 1.55 5.19 2.64 .83 .74 3.81 3.84 1.83 3.10 .96 .71 1.52 26.72 58 4.54 4.18 .89 2.43 6.45 2.17 1.64 4.50 2.15 2.08 1.91 4.17 37.11 1.21 59 3.93 .22 1.81 1.66 1.49 1.57 1.66 2.60 .10 1.65 3.61 21.51 2.92 3.92 3.51 3.00 33.90 60 4.87 2.13 1.10 1.21 2.97 3.42 2.26 2.59 1.41 3.21 1.45 .55 1.21 2.15 3.96 3.51 2.04 2.83 2.26 2.32 26.90 61 .80 1.40 62 1.75 2.57 2.05 1.03 1.82 .11 1.40 .39 1.58 2.27 17.17 1.26 1.10 1.87 1.14 1.78 2.20 .96 2.54 1.06 1.79 3.44 .15 19.29 63 .93 1.70 3.47 20.40 64 1.05 1.41 1.39 1.48 1.11 1.44 1.51 2.79 2.12 65 4.64 .74 2.13 2.37 2.65 2.44 3.44 2.22 2.86 .44 3.63 5.79 33.35 66 1.74 2.69 1.53 3.42 1.37 4.24 6.25 2.14 .62 3.51 3.28 4.29 35.08 1.87 67 .83 1.12 1.99 1.08 4.02 1.51 2.74 3.26 3.02 2.24 3.09 26.77 .72* .92* 68 2.39 2.22 1.28 1.02 2.37 1.58 3.35 6.16 5.52 1.49 29.02* 69 1.17* 3.04 1.93 1.30* .71* 1.88* 1.07* 3.28* .05* .07* 1.18* 1.11 16.79* 2.42 4.99 3.25 1.88* 2.89 4.20 3.05 2.76 32.91* 70 1.21 1.72 2.28 2.26 71 1.56 1.10 .95 .93 2.62 3.60 .94* 2.25* 1.02* 1.19* 2.59 .58 19.33* 72 1.22 .94 1.57 1.99 3.83 1.83 3.60 2.56 1.74 .48 3.56 . 45 23.77 73 1.15 3.52 .37 1.23 2.39 .74 1.50 1.15 1.54 2.96 2.61 2.62 21.78 . 49 1.95 4.09 74 1.28 2.61 3.61 1.86 2.05 3.38 4.31 3.34 30.66 1.69 75 3.23 .58 2.58 1.94 1.33 1.30 1.96 2.61 3.32 .38 3.84 .63 23.70 76 2.44 1.04 .84 .56 1.15 .41 2.76 .40 1.73 2.52 5.02 2.14 21.01 77 4.32 5.08 2.01 2.83 2.28 2.98 3.20 4.34 .91 2.33 4.41 2.54 37.23 78 1.78 1.74 .69 2.30 24.52 3.35 3.31 2.28 1.33 2.00 .42 . 44 4.88 79 1.56 1.48 4.39 2.67 3.33 4.10 1.35 3.00 2.09 2.01 3.07 5.18 34.23 80 1.96 1.79 1.71 1.21 2.55 3.42 4.35 2.26 1.08 1.72 1.93 2.59 26.57 81 3.98 .93 3.43 2.71 1.56 3.91 1.65 2.22 3.56 3.76 1.84 4.63 34.18 1.90 82 2.74 . 41 1.60 1.21 1.99 3.57 .74 1.60 1.55 2.52 2.40 22.23 83 1.85 1.98 1.21 2.46 4.85 1.34 .63 .72 1.63 .97 1.60 1.87 21.11 2.91 1.42 .19* 1.83 1.15 84 4.71 1.44 4.18 1.80 2.82 22.45*

1.92

2.00

1.30

.61

2.62

1.79

21.77

TOTAL MONTHLY PRECIPITATION AMOUNTS IN INCHES

FROM SUMMARY OF DAY DATA

										RIOD OF RECORD: 5305-9002 NTH: ALL HOURS: ALL			
YEAR	JAN	PKB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
86 87 88 89 90	3.70 1.62 4.94 .89 3.24	.13 2.69 3.12 3.02 4.99	4.13 2.57 3.81 2.70	2.39 1.49 .96 3.72	2.40 2.35 2.67 1.45	2.00 4.91 .79 2.13	2.53 4.40 2.56 3.72	1.31 2.22 1.29 2.85	3.30 3.61 2.89 2.31	3.28 5.43 4.37 2.41	2.26 3.76 1.38 2.26	3.59 1.31 3.46 6.25	31.02 36.36 32.24 33.71 8.23*
LEAST	.83	.13	.37	.42	.74	.11	.63	.40	.10	.38	.21	.15	17.17
GREATEST	4.94	5.19	4.39	3.72	6.45	4.91	6.25	6.16	5.52	5.43	5.02	6.25	37.23
MEAN	2.53	2.07	1.98	1.60	2.48	2.56	2.61	2.26	2.18	2.15	2.44	2.68	27.49
MEDIAN	2.08	1.74	1.82	1.32	2.37	2.30	2.55	2.10	2.01	2.33	2.26	2.47	26.77
SD	1.262	1.451	.977	.837	1.156	1.243	1.295	1.186	1.137	1.259	1.159	1.511	5.981
TOTAL OBS	1140	1045	1116	1062	1102	1078	1108	1097	1055	1117	1080	1124	13124

THE GREATEST VALUE OF 6.45 OCCURRED ON 05/58

NOTE: *THE VALUE IS BASED ON A MONTH WITH LESS THAN 90% OF THE DATA AVAILABLE FOR THE MONTH

B - 2 - 2B

OPERATING LOCATION 'A' USAFETAC, ASHEVILLE NC EXTREME DAILY PRECIPITATION AMOUNTS IN INCHES

STATION NUMBER: 106070 STATION NAME: SPANGDAHLEM AB GERMANY PERIOD OF RECORD: 5305-9002

		LS	T TO UTC	-01					HTMOM	ALL 1	HOURS: A	ᄕ	
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
53	•••••	• • • • • • • •	• • • • • • • •	• • • • • • • •	*	1.32*	.55	.85	.47	.33	.10	.22	1.32*
54	.38	.34	.49	.50	.43	.48	.78	.55	.72	.63	.36	.80	.80
55	.61	.46	.22	.12	.34	1.18	1.08	1.04	.31	.51	.31	.76	1.18
56	.39	.13	.62	.46	.67	.64	1.46	.51	.74	.36	.45	.38	1.46
57	.32	. 96	1.19	.57	.18	1.01	.77	.30	.47	.46	.27	.47	1.19
58	.76	.54	.30	1.05	1.12	.50	.89	.88	1.25	.51	.55	.42	1.25
59	.87	.21	.43	.27	.28	.30	.79	.87	.09	.42	.53	1.12	1.12
60	.74	.70	.25	.19	1.19	1.60	.55	. 48	1.10	.46	.69	1.25	1.60
61	.67	.24	.23	.19	.42	1.23	.84	.35	.85	.90	.36	.40	1.23
62	.72	.72	.58	.33	.31	.11	.27	.51	.32	.18	.51	.51	.72
63	.38	.21	.72	.49	.51	.47	.54	.79	.23	.77	.68	.10	.79
64	.25	.24	.76	.47	.38	.35	.36	.33	.36	.65	.90	.47	-90
65	.77	.15	.55	.34	.55	.51	.93	.41	.92	.35	.66	.88	.93
66	.38	.43	.24	.43	.40	.88	1.63	.49	.26	1.28	1.31	.95	1.63
67	.28	.30	.42	.33	1.12	.41	.89	.34	1.23	.84	.73	1.09	1.23
68	.34	. 45	.32	.40	.50	.41	1.21	1.44	.82	.26	.45*	.32*	1.44*
69	.23*	.88	. 40:	.35*	.53*	.67*	.52*	.61*	.02*	.05*	.40*	.32	.88*
70	.45	.57	. 5 0	.89*	1.21	1.67	.91	.43	.61	1.09	.31	.45	1.67*
71	.42	.22	.20	.55	.73	.93	.73*	.56*	.46*	.30*	.56	.20	.93*
72	.21	.47	.54	.36	.93	.63	.93	.81	1.32	.23	1.19	.22	1.32
73	.21	.90	.26	.24	.40	.22	.30	.27	.52	1.10	.83	.67	1.10
74	.29	.41	.39	.27	1.42	1.00	.46	.85	.66	.79	.59	.63	1.42
75	.71	.36	.55	.36	.36	.23	.69	1.12	1.35	.12	1.11	.44	1.35
76	.42	.44	.22	.16	.23	.38	.62	.10	.55	.56	2.96	.49	2.96
77	1.77	1.15	.44	.63	.61	.81	1.01	1.15	.27	.74	1.27	.41	1.77
78	.28	.37	.54	.17	.71	.51	.49	.84	.52	.14	.18	1.20	1.20
78 79	.28	.35	.69	.73	.57	1.54	.80	.79	.97	.81	.55	1.39	1.54
80	.54	.46	.37	.73	1.11	.53	.79	1.15	.42	.67	.48	.52	1.15
00		.40	• • • •	.31	****		•••	1.13	.42	,	.40	.52	2.13
81	1.60	.50	.51	1.63	.30	.79	.50	.87	.92	.61	.80	1.17	1.63
82	.54	.15	.28	.71	.63	1.03	.22	.52	.37	.48	.40	.41	1.03
83	. 45	. 36	.28	.55	.85	.44	.13	.43	.46	. 19	.71	.38	.85
84	.69	.62	.41	.68	.78	.63	.15*			.87	.57	.45	.87*
85	.37	.30	.44	.41	.30	.62	.67	.49	.70	.26	.56	.50	.70

EXTREME DAILY PRECIPITATION AMOUNTS IN INCHES FROM SUMMARY OF DAY DATA

STATION NUMBER: 106070 STATION NAME: SPANGDAHLEM AB GERMANY PERIOD OF RECORD: \$305-9002 LST TO UTC: -01 MONTH: ALL HOURS: ALL

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
86	.88	.07	1.26	.63	.75	.71	1.20	.50	.81	.93	.53	.95	1.26
87	1.02	.56	.40	.30	.68	1.18	.75	.55	.93	1.59	.87	.52	1.59
88	.74	.69	.46	.49	.50	.22	.38	.26	.79	1.30	.64	1.71	1.71
89	.39	.63	.50	.70	.57	.45	1.81	.81	.71	.52	.91	1.56	1.81
90	.93	.94											.94*

GREATEST 1.77 1.15 1.26 1.63 1.42 1.67 1.81 1.44 1.35 1.59 2.96 1.71 2.96

TOTAL OBS 1140 1045 1116 1062 1102 1078 1108 1097 1055 1117 1080 1124 13124

THE GREATEST VALUE OF 2.96 OCCURRED ON 11/30/76

NOTE: *THE VALUE IS BASED ON A MONTH WITH LESS THAN 90% OF THE DATA AVAILABLE FOR THE MONTH

B - 2 - 3B

PERCENTAGE FREQUENCY OF OCCURRENCE OF SNOWFALL IN INCHES

FROM SUMMARY OF DAY DATA

STATION NUMBER: 106070 STATION NAME: SPANGDAHLEM AB GERMANY PERIOD OF RECORD: 5305-9002 LST TO UTC: -01 MONTH: ALL HOURS: ALL AMOUNTS JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC ANN (INCHES) NONE 55.4 60.8 72.8 83.8 98.7 99.8 100.0 100.0 99.9 98.7 81.9 66.0 84.8 TRACE 21.4 20.4 15.6 11.2 1.0 .2 1.1 10.6 18.8 8.4 0.1-0.4 10.4 7.1 4.8 3.2 .2 .2 3.1 7.0 3.0 0.5-1.4 7.5 8.3 4.7 .9 3.0 5.2 .1 2.5 1.5-2.4 2.0 2.5 .3 2.0 1.5 .1 .6 .8 2.5-3.4 1.8 1.1 .5 .4 .3 .5 .4 3.5-4.4 .4 .3 .2 .1 .2 .1 .1 4.5-6.4 .2 .3 .1 .1 .2 .3 .1 6.5-10.4 .2 .2 .0 10.5-15.4 .1 .1 .0 15.5-25.4 25.5-50.4 OVER 50.4 ······ DAYS WITH MEAS AMTS 23.2 18.9 11.6 5.0 .4 .2 7.6 15.2 6.9 TOTAL NO. OF OBSERVATIONS 1045 1116 1063 1120 1099 1111 1099 1055 1119 1086 1128 13180

TOTAL MONTHLY SNOWFALL AMOUNTS IN INCHES FROM SUMMARY OF DAY DATA

STATION NUMBER: 106070 STATION NAME: SPANGDAHLEM AB GERMANY PERIOD OF RECORD: 5305-9002 LST TO UTC: -01 MONTH: ALL HOURS: ALL

		L	TO UT	C: -01					MONTE	: ALL	HOURS: A	TL	
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	VON	DEC	ANNUAL
53		• • • • • • •	• • • • • • •	• • • • • • • •	.0*	TRACE	.0		.0	.0	.0	TRACE	TRACE*
	6.0	1.0	1.4	TRACE	.0	.0	.0	.0	.0	.0	TRACE	.5	8.9
54 55	3.4	14.8	5.1	TRACE	.0	.0	.0	.0	.0	.3	1.1	.5	25.2
33	3.*	14.0	3.1	IMCE	.0	••	••	.0	.0		1.1	• • •	23.2
56	3.4	3.9	.3	.8	.0	.0	.0	.0	.0	.0	1.1	1.8	11.3
57	4.7	7.2	.0	TRACE	1.4	.0	.0	.0	.0	.0	TRACE	1.4	14.7
58	5.0	6.4	5.3	1.8	.0	.0	.0	.0	.0	.0	TRACE	2.6	21.1
59	17.1	TRACE	.3	.3	.0	.0	.0	.0	.0	.0	TRACE	-4	18.1
60	9.3	5.5	TRACE	.3	.0	.0	•0	.0	.0	.0	TRACE	14.1	29.2
61	6.3	4.1	.4	.0	.0	.0	.0	.0	.0	.0	2.5	TRACE	13.3
62	.5	13.1	8.1	.3	.0	.0	.0	.0	.0	TRACE	10.3	6.1	38.4
63	8.5	11.0	1.6	TRACE	.0	.0	.0	.0	.0	.0	.0	1.7	22.8
64	6.4	1.2	1.8	TRACE	.0	.0	.0	.0	.0	TRACE	.0	7.0	16.4
65	7.5	8.7	2.5	TRACE	.0	.0	-0	.0	TRACE	.0	7.5	6.8	33.0
66	3.1	TRACE	6.2	TRACE	.0	.0	•0	.0	.0	TRACE	9.0	8.5	26.8
67	7.3	.7	.7	.9	.1	.0	.0	.0	.0	.0	1.3	10.2	21.2
68	24.0	8.4	2.4	.1	.0	.0	.9	.0	.0	.0	.4*	9.7*	45.0*
69	.2*	25.1	1.1	.3*	.0*	.0*	·0*	.0*	.0*	.0*	1.5*	7.0	35.2*
70	10.6	12.0	16.1	.5*	.0	.0	.0	.0	.0	.0	1.3	10.8	51.3*
71	.8	3.8	6.5	.0	.0	.0	٠0*	.0*	.0*	.0*	4.4	TRACE	15.5*
72	10.4	.6	1.9	.3	.0	.0	.0	.0	.0	.0	4.9	.1	18.2
73	3.4	18.8	.6	2.8	TRACE	.0	.0	.0	.0	.2	2.3	6.9	35.0
74	TRACE	1.3	5.0	.0	TRACE	.0	.0	.0	.0	TRACE	.3	2.6	9.2
75	.1	TRACE	12.2	8.5	TRACE	TRACE	.0	.0	.0	TRACE	TRACE	.8	21.6
76	2.4	6.7	TRACE	TRACE	.0	.0	.0	.0	.0	.0	.3	7.9	17.3
77	15.6	TRACE	.3	.4	.0	.0	.0	.0	.0	.0	1.8	2.8	20.9
78	7.2	9.7	2.6	.7	.0	.0	.0	.0	.0	.0	.2	3.5	23.9
79	13.7	2.4	1.4	3.2	2.0	.0	.0	.0	.0	.0	1.0	4.4	28.1
80	2.0	TRACE	TRACE	.2	.0	.0	.0	.0	.0	.0	5.0	12.2	19.4
81	15.2	2.6	2.7	21.0	TRACE	.0	.0	.0	.0	TRACE	3.0	15.9	60.4
82	9.1	.3	3.0	.9	TRACE	.0	.0	.0	.0	.0	TRACE	1.9	15.2
83	7.2	8.1	2.1	.2	.0	.0	•0	.0	.0	.0	.1	.5	18.2
84	16.6	7.8	3.9	6.0	.0	.0	.0*			.0	.0	1.7	36.0*
85	12.7	2.5	4.3	1.8	TRACE	.0	.0	.0	.0	.0	12.7	.4	34.4
	i												

TOTAL MONTHLY SNOWFALL AMOUNTS IN INCHES FROM SUMMARY OF DAY DATA

STATION NUMBER: 106070 STATION NAME: SPANGDAHLEM AB GERMANY PERIOD OF RECORD: 5305-9002 LST TO UTC: -01 MONTH: ALL HOURS: ALL JAN FEB MAR OCT NOV DEC YEAR APR MAY JUN JUL AUG SEP ANNUAL 86 9.0 1.1 .4 1.5 .0 .0 .0 .0 .0 .0 .0 20.1 87 2.3 9.6 6.6 TRACE TRACE .0 .0 -0 .0 .0 2.3 TRACE 20.8 88 2.7 9.9 5.4 .3 .0 .0 .0 .0 .0 .0 3.2 TRACE 21.5 89 TRACE 1.4 .8 .1 .0 .0 .0 .0 .0 .0 TRACE TRACE 2.3 TRACE TRACE 90 TRACE* LEAST TRACE TRACE .0 .0 .0 .0 .0 .0 .0 .0 TRACE 2.3 16.1 21.0 GREATEST 24.0 25.1 2.0 TRACE .0 .0 TRACE .3 12.7 15.9 60.4 MEAN 7.0 5.7 3.1 1.5 .1 TRACE .0 TRACE TRACE 2.2 4.1 22.1 .0 MEDIAN 6.4 3.9 2.0 .3 .0 .0 .0 1.0 20.9 .0 .0 .0 2.3 .407 SD 5.781 5.890 3.551 3.888 .000 .000 .000 .000 .060 3.236 4.479 10.706 TOTAL OBS 1139 1045 1116 1063 1120 1099 1111 1099 1055 1119 1086 1128 13180

THE GREATEST VALUE OF 25.1 OCCURRED ON 02/69

NOTE: *THE VALUE IS BASED ON A MONTH WITH LESS THAN 90% OF THE DATA AVAILABLE FOR THE MONTH

B - 3 - 2B

OPERATING LOCATION 'A' USAFETAC, ASHEVILLE NC EXTREME DAILY SNOWFALL AMOUNTS IN INCHES

PERIOD OF RECORD: 5305-9002 MONTH: ALL HOURS: ALL STATION NUMBER: 106070 STATION NAME: SPANGDAHLEM AB GERMANY

		L	ST TO UTC	C: -01			•		MONTE	i: ALL	HOURS: A	ALL	
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ост	NOV	DEC	ANNUAL
53	• • • • • • • • • • • • • • • • • • •	• • • • • • •	• • • • • • • •	• • • • • • •	.0*	TRACE	.0		.0	.0		TRACE	TRACE*
54	3.5	.5	1.0	TRACE	.0	.0	.0	.0	.0	.0	TRACE	.5	3.5
55	1.8	2.9	3.1	TRACE	.0	.0	.0	.0	.0	.3	1.1	.3	3.1
56	.9	1.3	.3	.6	.0	.0	.0	.0	.0	.0	1.1	.7	1.3
57	3.0	3.0	.0	TRACE	1.3	.0	.0	.0	.0	.0	TRACE	.4	3.0
58	2.0	2.3	3.0	1.4	.0	.0	.0	.0	.0	.0	TRACE	2.0	3.0
59	3.0	TRACE	.3	.3	.0	.0	.0	.0	.0	.0	TRACE	.3	3.0
60	1.4	2.2	TRACE	.3	•0	.0	.0	.0	.0	.0	TRACE	11.9	11.9
61	2.8	1.4	.3	.0	.0	.0	.0	.0	.0	.0	2.3	TRACE	2.8
62	.4	4.1	2.4	.3	.0	.0	.0	.0	.0	TRACE	5.1	2.3	5.1
63	3.3	2.1	1.5	TRACE	.0	.0	.0	.0	.0	.0	.0	.8	3.3
64	2.9	.7	1.0	TRACE	.0	.0	.0	.0	.0	TRACE	.0	2.5	2.9
65	3.2	3.3	1.2	TRACE	•0	.0	.0	.0	TRACE	.0	2.7	3.0	3.3
66	1.1	TRACE	1.9	TRACE	.0	.0	.0	.0	.0	TRACE	5.1	2.0	5.1
67	2.6	. 4	.5	.5	.1	.0	.0	.0	.0	.0	1.3	4.6	4.6
68	7.1	5.6	2.2	.1	.0	.0	.0	.0	.0	.0	.4*	5.1*	7.1*
69	.2*	7.2	.4	.3*	.0*	.0*	.0*	.0*	.0*	.0*	.7*	1.7	7.2*
70	3.0	2.3	4.3	.3*	•0	.0	.0	.0	.0	.0	.7	3.2	4.3*
71	.5	1.9	2.0	.0	.0	.0	.0*	.0*	.0*	.0*	1.9	TRACE	2.0*
72	2.6	.4	1.4	.2	•0	.0	.0	.0	.0	.0	2.5	.1	2.6
73	1.3	5.3	.5	.9	TRACE	.0	.0	.0	.0	.2	1.2	3.7	5.3
74	TRACE	.8	1.6	.0	TRACE	.0	.0	.0	.0	TRACE	.3	1.3	1.6
75	.1	TRACE	4.8	2.5	TRACE	TRACE	.0	.0	.0	TRACE	TRACE	.7	4.8
76	1.5	4.4	TRACE	TRACE	.0	.0	.0	.0	.0	.0	.3	1.9	4.4
77	5.0	TRACE	.3	.4	•0	.0	.0	.0	.0	.0	.7	1.4	5.0
78	1.9	2.2	.8	.4	•0	.0	.0	.0	.0	.0	.2	2.2	2.2
79	4.0	.9	.9	3.2	2.0	.0	.0	.0	.0	.0	1.0	1.8	4.0
80	1.4	TRACE	TRACE	.1	.0	.0	.0	.0	.0	.0	3.9	5.0	5.0
81	3.7	1.0	2.0	15.1	TRACE	.0	.0	.0	.0	TRACE	2.1	2.9	15.1
82	5.4	.3	1.0	.8	TRACE	.0	.0	.0	.0	.0	TRACE	1.0	5.4
83	3.2	2.2	1.5	.2	.0	.0	.0	.0	.0	.0	.1	.3	3.2
84	3.3	3.8	2.3	3.6	.0	.0	.0*			.0	.0	1.5	3.8*
85	3.7	1.9	2.8	1.6	TRACE	.0	.0	.0	.0	.0	3.6	.3	3.7

EXTREME DAILY SNOWFALL AMOUNTS IN INCHES FROM SUMMARY OF DAY DATA

STATION NUMBER: 106070 STATION NAME: SPANGDAHLEM AB GERMANY PERIOD OF RECORD: 5305-9002 LST TO UTC: -01 MONTH: ALL HOURS: ALL

		100	1 10 010	01					PION III.		HOURS. I	TILL THE	
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	VOM	DEC	ANNUAL
86	2.9	.7	.3	.9	.0	.0	.0	.0	.0	.0	.0	3.3	3.3
87	.7	3.3	2.0	TRACE	TRACE	.0	.0	.0	.0	.0	1.7	TRACE	3.3
88	1.4	3.1	2.3	.3	.0	.0	.0	.0	.0	.0	2.7	TRACE	3.1
89	TRACE	.6	.8	.1	.0	.0	.0	.0	.0	.0	TRACE	TRACE	.8
90	TRACE	TRACE											TRACE*
GREATEST	7.1	7.2	4.8	15.1	2.0	TRACE	.0	.0	TRACE	.3	5.1	11.9	15.1
TOTAL OBS	1139	1045	1116	1063	1120	1099	1111	1099	1055	1119	1086	1128	13180
							 					· • • • • • •	

THE GREATEST VALUE OF 15.1 OCCURRED ON 04/27/81

NOTE: *THE VALUE IS BASED ON A MONTH WITH LESS THAN 90% OF THE DATA AVAILABLE FOR THE MONTH

B - 3 - 3B

PERCENTAGE FREQUENCY OF OCCURRENCE OF SNOW DEPTH IN INCHES

FROM SUMMARY OF DAY DATA

STATION NUMBER: 106070 STATION NAME: SPANGDAHLEM AB GERMANY PERIOD OF RECORD: 5305-9002 LST TO UTC: -01 MONTH: ALL HOURS: ALL AMOUNTS JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC ANN (INCHES) NONE 53.2 57.6 80.3 98.1 99.8 100.0 100.0 100.0 100.0 100.0 92.3 72.2 87.7 15.9 TRACE 19.4 11.5 1.3 .1 4.4 16.1 5.7 8.1 1 6.4 2.7 .2 4.3 .1 1.1 1.9 2 5.7 4.5 1.2 1.0 2.8 1.3 .1 4.8 3.2 2.1 1.0 4-6 9.5 7.0 2.2 .1 .7 2.0 1.8 7-12 2.8 1.7 .3 .2 .6 .5 13-24 .1 .0 25-36 37-48 49-60 61-120 **OVER 120** DAYS WITH MEAS AMTS 30.8 23.0 8.2 .6 .1 3.3 11.8 6.5 TOTAL NO. OF OBSERVATIONS 1018 932 990 947 996 983 987 978 937 1001 970 1003 11742

EXTREME DAILY SNOW DEPTH AMOUNTS IN INCHES FROM SUMMARY OF DAY DATA

STATION NUMBER: 106070 STATION NAME: SPANGDAHLEM AB GERMANY PERIOD OF RECORD: 5305-9002

LST TO UTC: -01 MONTH: ALL HOURS: ALL

		LS	TO UTO	: -01					MONTH:	ALL	HOURS:	ALL	
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SRP	OCT	NOV	DEC	ANNUAL
		• • • • • • • •	• • • • • • • •	•••••	•••••				• • • • • • • • • •	•••••	••••••		
53				_	0*	0	0	0	0	0	0	TRACE	TRACE*
54	4	1	TRACE	0	0	0	0	0	0	0	TRACE	1	4
55	2	8	7	0	0	0	0	0	0	0	TRACE	TRACE	8
56	3	4	TRACE	0	0	0	0	0	0	0	TRACE	1	4
57	4	3	0	0	1	0	0	0	0	0	TRACE	TRACE	4
58	4	4	3	TRACE	0	0	0	0	0	0	0	1	4
59	5	TRACE	TRACE	0	0	0	0	0	0	0	0	0	5
60	5	3	TRACE	0	0	0	0	0	0	0	0	11	11
61	3	1	0	0	0	0	0	0	0	0	TRACE	TRACE	3
62	TRACE	6	5	0	0	0	0	0	0	0	6	1	6
63	5	6	3	0	0	0	0	0	0	0	0	TRACE	6
64	*	*	*	*	*	*	*	*	*	*	*	*	*
65	*	*	*	*	*	*	*	*	*	*	*	*	*
66	*	*	*	*	*	*	*	*	*	*	*	*	*
67	*	*	*	*	*	*	*	*	*	*	*	*	*
68	8	1	TRACE	0	0	0	0	0	0	0	TRACE*	6*	8*
69	6	14	TRACE	TRACE*	0*	0*	0*	0*	0*	0*	2*	4	14*
70	6	3	8	0*	0	0	0	0	0	0	TRACE	5	8*
71	5	1	3	0	0	0	0*	0*	0*	0*	1	0	5*
72	4	2	0	0	0	0	0	0	0	0	3	0	4
73	1	6	TRACE	TRACE	0	0	0	0	0	0	2	5	6
74	0	TRACE	2	0	0	0	0	0	0	0	0	1	2
75	0	0	6	4	0	0	0	0	0	0	0	TRACE	6
76	3	5	TRACE	0	0	0	0	0	0	0	0	1	5
77	6	TRACE	0	TRACE	0	0	0	0	0	0	0	TRACE	6
78	2	7	TRACE	0	0	0	0	0	0	0	TRACE	1	7
79	12	2	TRACE	1	TRACE	0	0	0	0	0	1	1	12
80	2	0	TRACE	0	0	0	0	0	0	0	1	4	4
81	4	1	TRACE	12	0	0	0	0	0	0	2	6	12
82	7	TRACE	TRACE	TRACE	0	0	0	0	0	0	0	1	7
83	1	6	TRACE	0	0	0	0	0	0	0	0	TRACE	6
84	8	4	5	TRACE	0	0	0*			0	0	TRACE	8*
85	8	2	3	0	0	0	0	0	0	0	5	1	8

EXTREME DAILY SNOW DEPTH AMOUNTS IN INCHES

FROM SUMMARY OF DAY DATA

		L	TO UTO	: -01					MONTH		OURS: A	LL	
(BAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUA
86	2	1	TRACE	TRACE	0	0	0	0	0	0	0	4	4
87	1	5	2	0	0	0	0	0	0	0	2	0	5
88	TRACE	3	5	0	0	0	0	0	0	0	2	0	5
89 90	TRACE 0	TRACE 0	0	TRACE	0	0	0	0	0	0	0	TRACE	TRACE 0*
ireatest	12*	14*	8*	12*	1*	0*	0*	0*	0*	0*	6*	11*	14*
OTAL OBS	1018	932	990	947	996	983	987	978	937	1001	970	1003	11742

THE GREATEST VALUE OF 14 OCCURRED ON 02/12/69

NOTE: *THE VALUE IS BASED ON A MONTH WITH LESS THAN 90% OF THE DATA AVAILABLE POR THE MONTH

B - 4 - 2B

FIRST AND LAST DAYS OF OCCURRENCE BY SNOW-YEAR FROM SUMMARY OF DAY DATA

STATION NUMBER: 106070 STATION NAME: SPANGDAHLEM AB GERMANY

PERIOD OF RECORD: 5305-9002 SNOW-YEAR: 1 AUG - 31 JUL

						DIOW-IEAK.	1 A0G - 31 00D
SNOW-	/P1D	first Snowfall	FIRST	FIRST MEASURABLE SNOW DEPTH	last Snowfall	last Measurable Snowfall	LAST MRASURABLE SNOW DEPTH
			SNOWFALL				
52 -	53	JUN 02			JUN 02		
53 -	54	DEC 19	JAN 01	JAN 03	APR 19	MAR 05	FEB 10
54 -	55	NOV 10	DEC 25	DEC 25	APR 16	MAR 21	MAR 17
55 -	56	OCT 28	OCT 28	JAN 09	APR 20	APR 17	FEB 28
56 -	57	NOV 23	NOV 29	DEC 23	MAY 07	MAY 07	MAY 05
57 -	58	NOV 22	DEC 07	JAN 21	APR 17	APR 17	MAR 15
58 -	59	NOV 02	DEC 09	DEC 09	APR 20	APR 07	JAN 20
59 -	60	NOV 12	DEC 08	JAN 12	APR 29	APR 26	FEB 20
60 -	61	NOV 06	DEC 10	DEC 21	MAR 28	MAR 21	FEB 04
61 -	62	NOV 03	NOV 05	FEB 01	APR 30	APR 14	MAR 09
62 -	63	OCT 30	NOV 11	NOV 20	APR 05	MAR 26	MAR 07
63 -	64	DEC 10	DEC 13		APR 08	MAR 19	122, 07
64 -	65	OCT 24	DEC 03		APR 27	MAR 08	
65 -	66	SEP 04	NOV 13		APR 14	MAR 30	
66 -	67	OCT 24	NOV 04		MAY 02	MAY 02	
67 -	68	NOV 07	NOV 27	JAN 01	APR 14	APR 04	FEB 23
68 -	69	NOV 19	NOV 19	DEC 16	APR 17	APR 15	FEB 25
69 -	70	NOV 17	NOV 24	NOV 25	APR 30	APR 30	MAR 16
70 -	71	NOV 09	NOV 16	DEC 22	MAR 27	MAR 12	MAR 08
71 -	72	NOV 19	NOV 19	NOV 23	APR 28	APR 11	FEB 03
72 -	73	NOV 15	NOV 16	NOV 17	MAY 07	APR 20	FEB 25
73 -	74	OCT 18	OCT 18	NOV 29	MAY 06	MAR 14	MAR 05
74 -	75	oct 01	NOV 30	DEC 13	JUN 03	APR 09	APR 04
75 -	76	OCT 10	DEC 13	JAN 26	APR 25	FEB 14	FEB 18
76 -	77	NOV 23	NOV 23	DEC 11	APR 16	APR 14	JAN 22
77 -	78	NOV 12	NOV 12	JAN 04	APR 16	APR 16	FEB 22
78 -	79	NOV 27	NOV 28	DEC 20	MAY 05	MAY 04	APR 04
79 -	80	NOV 12	NOV 18	NOV 18	APR 26	APR 25	JAN 04
80 -	81	NOV 04	NOV 28	NOV 29	MAY 04	APR 27	APR 29
30							

USAFETAC, ASHEVILLE NC OPERATING LOCATION 'A'

FIRST AND LAST DAYS OF OCCURRENCE BY SNOW-YEAR FROM SUMMARY OF DAY DATA

STATION NUMBER: 106070 STATION NAME: SPANGDAHLEM AB GERMANY

PERIOD OF RECORD: 5305-9002 SNOW-YEAR: 1 AUG - 31 JUL

											OLION - I		1 NOG - 3.		
••••	•••	• • • • • • •	FIRS	T	FIRS	T	FIR		LAST		LAS:	 r	LAST	r	• • • • •
			SNOWF	ALL	MEASUF	VABLE	MEASU	RABLE	SNOWFA	LL	MEASUR	ABLE	MEASUR	ABLE	
SNO	W-Y	EAR			SNOWE	ALL,	SNOW I	EPTH			SNOWF	ALL	SNOW DI	SPTH .	
81	-	82	OCT	23	NOV	11	NOV	30	MAY	01	APR	10	JAN	29	
82	-	83	NOA	16	DEC	10	DEC	23	APR	13	APR	03	FEB	19	
83	-	84	MOA	15	NOV	30	JAN	06	APR	16	APR	06	MAR	05	
84	-	85	DEC	18	DEC	26	JAN	02	MAY	04	APR	29	MAR	20	
85	-	86	NOV	02	NOA	19	NOA	21	APR	19	APR	11	FRB	11	
86		87	DEC	13	DEC	19	DEC	23	MAY	15	MAR	19	MAR	20	
87	-	88	NOV	12	NOV	25	NOA	25	APR	09	APR	09	MAR	06	
88	-	89	NOV	20	NOV	20	NOA	21	APR	27	APR	05	NOV	23	
89	-	90	MOA	27					FEB	28					
MEDI	AN-I	DATE	NOA	12	NOV	26	DEC	20	APR	22	APR	09	FEB	26	

PPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP			AAA	RRRR		THEFT		CCC
PPPPPI	PPPP	AAAA	LAAAA	RRRR	RRRRR	Jalalalalalalalalal	CCCC	cccc
PP	PP	AA	AA	RR	RR	TT	CC	CC
PP	PP	AA	λA	RR	RR	TT	CC	
PPPPPI	PPPP	AA	AA	RRRR	RRRRR	TT	CC	
PPPPPI	PPP	AAAAA	AAAAA	RRRR	RRRR	TT	CC	
PP		AAAAA	AAAAA	RR	RR	TT	cc	
PP		λA	AA	RR	RR	TT	cc	CC
PP		AA	λA	RR	RR	TT	cccc	CCCC
PP		ልእ	AA	RR	RR	TT	ccc	ccc

PART C

SURFACE WIND SUMMARIES

PRAK WINDS.

THESE TABLES ARE CREATED FROM SUMMARY OF DAY DATA. SPEEDS ARE IN KNOTS. DIRECTIONS ARE TO 16 COMPASS POINTS FROM THE BEGINNING OF PERIOD OF RECORD THROUGH JUNE 1968, BUT IN JULY 1968, ALL STATIONS EXCEPT THOSE OF THE NATIONAL WEATHER SERVICE STARTED RECORDING DIRECTIONS IN TENS OF DEGREES. DATA IS SUMMARIZED BY MONTH FOR EACH YEAR FOR THE ENTIRE PERIOD OF RECORD AVAILABLE. GIVEN: THE GREATEST MONTHLY VALUE FOR ALL YEARS COMBINED, THE GREATEST YEARLY VALUE FOR ALL YEARS COMBINED, AND THE DATE OF THE ABSOLUTE PEAK WIND RECORDED FOR THE ENTIRE PERIOD OF RECORD. AN ASTERISK (*) INDICATES A VALUE FOR A MONTH FOR WHICH LESS THAN 90% OF THE DATA ARE AVAILABLE. AN ASTERISK ALSO DENOTES A YEAR(S) WITH ONE OR MORE MISSING AND/OR INCOMPLETE MONTHS.

PEAK WINDS--PERCENT OCCURRENCE FREQUENCY.

ALSO FROM SUMMARY OF DAY DATA. DATA IS SUMMARIZED BY MONTH, FOR ALL YEARS COMBINED, FOR ELEVEN WIND SPEED GROUPS. THE 1-4 KNOT SPEED GROUP INCLUDES CALM WINDS. IF THE PEAK WIND IS REPORTED FOR A PARTICULAR DAY AS "CALM," THAT COUNT GOES INTO THE "1-4 KNOT" CATEGORY. TABLES INCLUDE MEANS, MEDIANS, AND TOTAL OBSERVATION COUNTS. THE VALUES IN THIS SUMMARY ACCOUNT FOR A PEAK WIND BEING RECORDED FOR EACH DAY OF EACH MONTH.

WIND DIRECTION VS WIND SPEED--PERCENT OCCURRENCE FREQUENCY.
THESE TABLES ARE CREATED FROM HOURLY OBSERVATIONS. THEY SUMMARIZE
THE DATA AS FOLLOWS:

- BY EIGHT 3-HOUR STANDARD TIME PERIODS FOR EACH MONTH (ALL YEARS COMBINED).
- BY MONTH (ALL YEARS AND ALL HOURS COMBINED).
- BY YEAR (ALL YEARS AND ALL HOURS COMBINED).
- THESE TABLES GIVE A BIVARIATE DISTRIBUTION OF THE PERCENT OCCURRENCE
 FREQUENCY (POF) FOR ELEVEN WIND SPEED GROUPS VERSUS TWELVE WIND DIRECTION
 SECTORS GIVEN IN 30 DEGREE INCREMENTS. "CALM" AND "VARIABLE" WINDS ARE
 GIVEN SEPARATELY. CARDINAL WIND DIRECTIONS (N,E,S,W) APPEAR FOR REFERENCE.
 TOTAL PERCENTAGES, MEANS, AND MEDIANS FOR EACH SECTOR, ALONG WITH TOTAL OBSERVATION COUNTS, ARE PRINTED BELOW EACH SUMMARY.
- ALSO PROVIDED: A BIVARIATE DISTRIBUTION OF WIND DIRECTION VERSUS WIND SPEED FOR SPECIFIED CEILING/VISIBILITY CONDITIONS. THESE CONDITIONS ARE:

WHEN THE VISIBILITY IS GREATER THAN OR EQUAL TO 1/2 MILES (0800 METERS)
THE CEILING MUST BE GREATER THAN OR EQUAL TO 200 FEET BUT LESS THAN 1500 FEET.
IF THIS CONDITION IS NOT MET, THEN THE FOLLOWING CONDITION IS TESTED:
WHEN THE CEILING IS GREATER THAN OR EQUAL TO 200 FEET, THE VISIBILITY MUST
BE GREATER THAN OR EQUAL TO 1/2 (0800 METERS) BUT LESS THAN 3 MILES (4800 METERS).

CONVERSION: 1 KNOT = .514791 METERS PER SECOND

C - 1 - 2

PEAK SURFACE WINDS IN KNOTS FROM SUMMARY OF DAY DATA

STATION NUMBER: 106070 STATION NAME: SPANGDAHLEM AB GERMANY PERIOD OF RECORD: 5305-9002 MONTH: ALL HOURS: ALL LST TO UTC: -01 AUG ANN JAN FEB MAR APR MAY JUN JUL SEP OCT NOV DEC 53 55 56 57 * * * * * * 58 59 60 61 SSE*23 SW *25 W 32 W 29 W 32 SW 31 ENE 27 W 41 W *41 W 62 WSW 42 SW *34 SSW*35 W *34 WSW*33 W *27 SW *30 SW 39 E 24 E 24 W 41 W *62 62 ENE 30 E 24 WSW 32 ENE 28 W 29 ENE 29 SW 26 WSW 35 W 31 SW 28 WSW 40 NE 25 WSW 40 63 64 E 23 W *22 E 31 WSW 35 E 31 NW 28 W 30 S 29 WSW 29 SW 47 SW 34 SW 31 SW *47 WSW 42 W 29 WNW 32 WSW 30 WSW 35 SSW 34 WSW 28 W 25 SW 32 E 22 WSW 51 W WSW 51 65 66 49 SW 39 W 45 SW 31 SW 30 SW 27 S *27 E 25 WSW 27 WSW 26 W 32 SW 38 W *49 SW 24 W 44 WNW 37 WNW 28 W 38 WSW 37 NW *37 W 36 SSW*26 * SSW 29 W 35 W *44 67 W 36 SSW 32 W 41 WSW 39 WSW*26 W 24 27/38 26/33 24/27 22/26 24/*24 * 68 W *41 28/*28 26/ 31 26/ 31 25/*34 * 09/*25 28/*30 08/*22 08/*20 24/*22 23/*46 08/ 32 23/*46 69 09/ 37 29/ 48 28/ 34 33/*40 32/ 28 05/ 31 28/ 50 03/*20 25/ 34 29/ 37 27/ 42 07/ 31 70 28/*50 22/ 40 20/ 42 02/ 36 23/ 30 22/ 26 28/ 31 06/*18 20/*42 71 25/33 09/32 72 07/ 30 22/ 28 25/ 38 27/ 34 24/ 37 25/ 26 09/ 39 22/ 30 07/ 30 10/ 25 27/ 47 20/ 27 27/ 47 73 32/22 24/34 36/26 28/37 10/32 07/29 25/26 20/24 23/27 07/30 29/32 32/40 32/ 40 74 23/42 26/48 22/34 04/27 07/26 20/28 26/33 23/31 22/31 22/31 25/36 25/35 26/ 48 75 25/ 39 76 27/ 40 08/ 25 26/ 25 03/ 26 29/ 25 27/ 25 27/ 24 12/ 25 27/ 23 21/ 22 21/ 40 23/ 33 27/ 40 26/ 30 23/ 33 25/ 30 28/ 32 22/ 28 23/ 30 24/ 23 20/ 24 06/ 23 33/ 24 23/ 41 29/ 32 77 23/ 41 78 30/34 10/31 24/38 07/24 32/25 10/30 24/25 33/19 28/26 03/20 23/16 25/42 25/ 42 79 24/ 28 10/ 27 24/ 38 24/ 31 25/ 38 01/ 32 30/ 40 23/ 28 22/ 18 10/ 27 24/ 43 25/ 42 24/ 43 RΛ 22/ 32 21/ 29 23/ 31 29/ 32 09/ 33 27/ 26 26/ 24 09/ 32 23/ 23 23/ 33 25/ 31 24/ 31 09/ 33 25/38 30/32 26/35 10/26 21/23 24/23 10/22 24/21 23/30 27/35 34/32 23/39 23/ 39 Я1 23/31 08/23 27/41 02/31 23/28 28/23 09/24 25/27 22/27 22/33 27/28 24/44 82 24/ 44 83 23/38 23/43 27/37 21/41 22/31 19/32 25/26 23/30 23/34 21/43 23/49 29/29 23/ 49 84 28/ 40 22/ 29 21/ 35 36/ 26 19/ 36 24/ 22 31/*21 25/ 32 24/ 40 21/*20 28/*40 22/ 24 08/ 26 24/ 30 24/ 32 27/ 23 23/ 22 27/ 41 24/ 32 30/ 25 09/ 26 22/ 34 27/ 36 27/ 41

C - 2 - 1A

PEAK SURFACE WINDS IN KNOTS FROM SUMMARY OF DAY DATA

STATION NUMBER: 106070 STATION NAME: SPANGDAHLEM AB GERMANY PERIOD OF RECORD: 5305-9002 LST TO UTC: -01 MONTH: ALL HOURS: ALL

		шп		1100	ш	A	ZII.	•										,	.	J1 1						
ANN	DEC	1	VOV	1	OCT	,	EP	•••	AUG	••••	UL	••••	JUN	••••	MAY	••••	APR		MAR		FEB	1	JAN	J		N R
25/ 49	43	27/	30	24/	48	24/	27	26/	33	24/	 23	28/	39	24/	26	22/	36	04/	46	28/	26	06/	49	;	25	36
22/ 43																		08/								37
32/ 47																		30/								38
28/ 60	60	28/	31	24/	34	25/	21	08/	34	28/	35	09/	29	25/	25	22/	26	06/	30	24/	26	23/	24	/	21	39
26/*90																					81	29/	90	/	26	90
																										;
• • • • • • •	• • • •	• • • •	••••	••••	••••	••••		•••	• • • •			••••	•••	. .	•••		••••	• • • • •	•••	••••	••••		•••	•••	••••	•••••
26/9	60	28/	51	wsw	48	24/	44	22/	36	W	50	28/	40	24/	38	W	41	21/	46	28/	81	29/	90	/	26	atest

THE PEAK WIND OF 90 FROM 26/ OCCURRED ON 01/25/90

NOTE: *THE VALUE IS BASED ON A MONTH WITH LESS THAN 90% OF DATA AVAILABLE FOR THE MONTH \$THE VALUE IS 100 OR GREATER WITH LESS THAN 90% OF DATA AVAILABLE FOR THE MONTH

C - 2 - 1B

PERCENTAGE FREQUENCY OF OCCURRENCE OF DAILY PEAK WINDS FROM SUMMARY OF DAY DATA

STATION NUMBER: 106070 STATION NAME: SPANGDAHLEM AB GERMANY PERIOD OF RECORD: 5305-9002 LST TO UTC: -01 MONTH: ALL HOURS: ALL

														
MONTH	CALM-4	5-9	10-14	15-19	WII 20-24	ND SPEEDS 25-29	30-34	OTS 35-39	40-49	50-64	GE 65	MEAN WIND	MEDIAN WIND	TOTAL OBS
JAN	.7	15.2	26.9	22.1	17.3	9.6	5.0	1.7	1.4	.1	.1	17.3	16.0	884
FEB	.9	13.4	25.9	27.3	18.0	7.9	2.7	1.5	1.9	.4	.2	17.3	16.0	807
MAR	.3	8.9	26.2	25.2	22.0	9.5	5.1	1.9	.8	.0	.0	18.1	17.0	861
APR	.0	5.1	30.0	32.8	19.8	8.0	3.1	.9	.3	.0	.0	17.4	17.0	799
MAY	-2	7.2	27.1	36.1	20.0	7.0	1.7	.6	.0	.0	.0	16.8	16.0	844
JUN	.2	8.0	34.7	32.9	17.8	4.8	1.2	.2	.1	.0	.0	16.1	16.0	830
JUL	.0	10.8	32.8	32.5	16.2	5.0	1.5	.6	.4	.1	.0	16.0	15.0	813
AUG	.3	12.3	34.6	31.4	15.3	4.7	1.1	.3	.0	.0	.0	15.4	15.0	795
SEP	.4	16.4	35.7	24.2	13.9	6.7	2.4	.3	.1	.0	.0	15.3	14.0	764
OCT	.7	20.1	30.3	23.9	15.3	5.9	2.5	.7	.5	.0	.0	15.3	14.0	809
NOV	1.9	18.0	25.7	21.0	17.5	8.5	4.7	.9	1.7	.1	.0	16.7	15.5	810
DEC	1.6	16.6	24.4	22.5	17.7	8.7	4.7	2.0	1.6	.1	.0	17.1	16.0	853
ANNUAL	.6	12.7	29.4	27.6	17.6	7.2	3.0	1.0	.7	.1	.0	16.6	16.0	9869

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: JAN HOURS: 00-02 WIND SPEED IN KNOTS DIRECTION 1-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-49 50-64 GE 65 TOTAL MEAN MEDIAN (DEGREES) * WIND WIND (N) 350-010 .2 1.1 1.3 6.3 7.0 020-040 .5 7.2 .8 .3 .2 1.9 6.0 050-070 3.4 5.3 2.2 11.3 6.0 (E) 080-100 6.2 2.2 .4 8.8 4.0 3.0 110-130 .3 .3 2.0 1.0 140-160 3.3 .3 .1 . 4 3.5 (S, 170-190 .8 . 4 .8 2.0 6.5 6.0 200-220 1.4 4.5 1.7 .8 8.4 8.1 230-250 8.1 12.4 8.6 2.3 .1 31.5 7.8 7.0 (W) 260-280 4.7 .5 3.3 3.3 11.8 6.7 6.0 290-310 2.9 .9 .8 .1 4.7 5.1 3.0 320-340 .2 3.0 VARIABLE CALM TOTALS 30.0 30.9 18.3 4.3 100.0 5.7

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: JAN HOURS: 03-05

		PS	T TO UI	C: - 1					MONTE	: JAN	HOUR	S: 03-05)	
• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	• • • • • •	•••••	•••••	WIND S	PEED IN	KNOTS	•••••	•••••	•••••	•••••	•••••	• • • • • •	• • • • • • •
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	.9	.3	.1	•••••	•••••	••••••	•••••	• • • • • • •	•••••	•••••	•••••	1.3	4.8	4.0
020-040	.9	.7	.3	.1								2.0	5.8	5.0
050-070	4.5	3.8	1.6	.9								10.7	6.4	5.0
(E) 080-100	5.6	4.1	.4									10.2	4.3	4.0
110-130	.7	.2										.9	2.9	2.0
140-160	.2											.2	2.0	2.0
(S) 170-190	.4	.7	.8	.1								2.0	8.0	8.5
200-220	2.3	4.0	2.0	.5	.2							9.0	7.8	7.0
230-250	9.0	13.4	8.6	1.5	.1							32.6	7.5	8.0
(W) 260-280	5.2	2.7	2.4	.5								10.9	6.2	5.0
290-310	2.6	.4	.9	.1								4.0	5.1	3.0
320-340	.7	.9	.3									1.8	5.5	5.0
VARIABLE		•••••	•••••	• • • • • •	• • • • • • •	••••••			•••••	•••••	•••••	• • • • • • •	•••••	•••••
CALM	1111111	//////	///////	//////	//////	//////	///////	///////	///////	///////	///////	14.4	//////	/////
TOTALS	33.0	31.2	17.4	3.7	.3							100.0	5.6	6.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED

FROM HOURLY OBSERVATIONS

STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - MONTH: JAN HOURS: 06-08 STATION NUMBER: 106070 PERIOD OF RECORD: JAN 80 - DEC 89

	• • • • • • •	• • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • • •		• • • • • •				• • • • • • •		• • • • • • • • • • • • • • • • • • • •
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		SPEED IN 25-29		35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	.8	.4	.2	•••••	•••••	•••••	••••••	******		•••••	• • • • • • • •	1.4	4.8	4.0
020-040	.3	.8	.2	.1								1.4	7.1	6.0
050-070	4.2	3.9	1.9	.6								10.7	6.6	6.0
(E) 080-100	6.6	3.0	.4									10.1	4.2	4.0
110-130	1.4											1.4	2.5	2.0
140-160	.2	.1	.1									.4	5.5	5.0
(S) 170-190	.3	.5	.8	.2								1.8	8.6	10.0
200-220	1.7	3.9	2.9	.8	.3							9.6	8.8	8.0
230-250	7.9	13.1	7.1	1.6								29.8	7.4	7.0
(W) 260-280	5.6	4.2	1.5									11.4	5.3	5.0
290-310	2.6	.4	.8									3.8	4.6	3.0
320-340	1.4	.6	.2									2.3	4.7	3.0
	! :••••			• • • • • • •	• • • • • • •						· • • • • • • • • • • • • • • • • • • •			
VARIABLE			.2									.2	11.0	11.0
CALM	1111111	//////	///////	///////	//////	///////	//////	'//////	///////	//////	///////	15.7	/////	//////
TOTALS	33.0	30.9	16.3	3.3	.3							100.0	5.5	6.0

TOTAL NUMBER OF OBSERVATIONS 924

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PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: JAN HOURS: 09-11

									110112				•	
••••••••		• • • • • •	•••••	•••••		PEED IN		•••••	•••••	•••••	•••••	• • • • • • • •	• • • • • •	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	WEDIAN WIND
(N) 350-010	.3	.3	.2	•••••	•••••	•••••	• • • • • •	•••••	•••••	•••••	•••••	.9	6.1	5.0
020-040	.6	.5	.2									1.4	5.3	5.0
050-070	3.5	5.2	1.9	.6	.1							11.4	6.8	6.0
(E) 080-100	6.2	3.4	1.1	.4								11.0	5.3	4.0
110-130	1.0	.1										1.1	2.3	2.0
140-160	.1	.4	.1									.6	6.2	5.5
(8) 170-190	.9	.8	.5									2.2	6.6	6.5
200-220	1.8	3.5	3.2	.9	.3							9.7	8.8	8.5
230-250	6.8	14.1	8.2	2.7								31.8	8.1	8.0
(W) 260-280	6.3	4.3	.8									11.4	4.7	4.0
290-310	2.3	.9	1.0	.1								4.2	5.4	4.0
320-340	1.1	.5	.2									1.8	4.9	4.0
VARIABLE	: 		2	•••••	• • • • • •	•••••	• • • • • •	•••••	•••••	• • • • • • •	• • • • • • •		10.7	10.0
CALM	,,,,,,,	//////	///////	///////	//////	///////	//////	///////	///////	///////	,,,,,,,	12.1	/////	/////
TOTALS	30.9	34.1	17.6	4.7	.4							100.0	6.0	6.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: JAN HOURS: 12-14

		LS	T TO UI	C: - 1					MONTH	: JAN	HOUR	8: 12-14	,	
•••••	• • • • • • • •	• • • • • •	•••••		WIND 8	SPEED IN	KNOTS	•••••	•••••	• • • • • • •	•••••	• • • • • • •	• • • • • •	• • • • • • •
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
		• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	•••••	• • • • • • •	• • • • • • •	•••••	• • • • • • •	• • • • • •		•••••	• • • • • • •
(N) 350-010	.3	.9	.6									1.8	8.3	8.0
020-040	.5	1.3	.4									2.3	6.5	6.0
050-070	2.7	2.5	2.6	.6								8.4	7.5	7.0
(E) 080-100	5.4	4.5	1.8	.4								12.2	5.8	5.0
110-130	2.5	.3										2.8	3.2	3.0
140-160	.3		.3									.6	7.2	7.0
(S) 170-190	.4	.6	.4	.1								1.6	7.8	8.0
200-220	1.5	3.7	3.1	1.0	.1							9.4	9.1	9.0
230-250	6.2	13.7	11.1	1.9	.6							33.7	8.6	8.0
(W) 260-280	6.4	4.8	1.4	.3								12.9	5.4	5.0
290-310	2.5	2.1	.2	.2								5.0	4.8	4.5
320-340	1.1	.9										1.9	4.1	4.0
	·		• • • • • •	• • • • • •	• • • • • •		• • • • • • •			• • • • • •	• • • • • • •			• • • • • •
VARIABLE		.5	.5									1.1	9.7	9.5
CALM	1111111	//////	//////	///////	//////	'//////	//////	<i>```</i>	///////	///////	//////	6.2	/////	/////
TOTALS	29.8	35.8	22.4	4.5	.7							100.0	6.8	7.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: JAN HOURS: 15-17

		LS	T TO UI	C: - 1					MONTE	I: JAN	HOUR	8: 15-17	,	
•••••	• • • • • • • • •	•••••	•••••	•••••	WIND 8	PEED IN	KNOTS			•••••	• • • • • • •	• • • • • • • •	•••••	•••••
Direction (Degrees)	1-4	5-9	10-14	15-19		25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
		• • • • • • • •	•••••	• • • • • • •	• • • • • •	•••••	• • • • • •	•••••	• • • • • • •	•••••	• • • • • •	• • • • • • • • •	•••••	••••••
(N) 350-010	1.1	1.0	.8									2.8	6.3	6.0
020-040	1.3	1.3	.5									3.1	5.6	5.0
050-070	2.1	4.7	2.4	.6								9.7	7.7	7.5
(E) 080-100	4.5	2.7	1.1	.4								8.8	5.4	4.0
110-130	1.9	.3										2.3	3.1	3.0
140-160	.3		.1									.4	4.3	2.5
(S) 170-190	1.9	.8	.3	.1								3.1	4.6	3.0
200-220	2.3	4.1	2.8	.6	.2							10.1	8.0	8.0
230-250	6.5	13.4	10.4	1.5	.1							31.9	8.0	8.0
(W) 260-280	3.8	4.5	1.7	.3	.1							10.5	6.4	6.0
290-310	2.8	1.5	.9	.1								5.3	5.1	4.0
320-340	1.8	.5										2.4	2.8	3.0
VARIABLE	: 	 .1	6	• • • • • •	• • • • • •		• • • • • •	•••••	• • • • • •	•••••	• • • • • • •	8	11.1	11.0
	1													
CALM	///////	//////	///////	///////	//////	'//////	11/1///	'//////	///////	'//////	//////	8.8	//////	/////
TOTALS	30.3	34.9	21.6	3.6	.4							100.0	6.3	6.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: JAN HOURS: 18-20

		160	1 10 01	C I					PONTE	: UAN	10012	5: 10-20	,	
••••••	• • • • • • •	• • • • • •	•••••	• • • • • • •	WIND S	PEED IN	KNOTS	•••••	• • • • • • •		• • • • • • • •	• • • • • • •	• • • • • •	• • • • • • •
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL	Mran Wind	WEDIAN WEDIAN
(N) 350-010	.9	.8	.3	• • • • • •	•••••	•••••	•••••	•••••	• • • • • • •	•••••	• • • • • • •	2.0	5.3	5.5
020-040	.3	.7	.2									1.2	6.5	6.0
050-070	4.8	3.8	2.3	.7								11.5	6.4	5.0
(E) 080-100	4.8	3.1	1.3	.4								9.6	5.6	4.5
110-130	.5	.1										.7	2.7	2.0
140-160	.3		.1	.1								.5	6.6	2.0
(8) 170-190	.7	.5	.5									1.7	6.6	7.0
200-220	3.2	3.9	3.5	1.1	.1							11.8	8.3	8.0
230-250	7.7	13.4	6.9	1.2			.1					29.3	7.3	7.0
(W) 260-280	4.8	3.8	1.5	.7	.1							10.9	6.2	5.0
290-310	2.7	.5	.7			.2						4.1	5.7	3.0
320-340	2.1	.4		.1								2.6	3.1	2.0
VARIABLE	! 	• • • • • •	5			•••••	• • • • • • •	• • • • • • •	•••••		•••••		13.6	12.0
CALM	,,,,,,,	,,,,,,				,,,,,,,,	1111111	,,,,,,,,	,,,,,,,	,,,,,,,,	'//////			
				, , , , ,								22.5		
TOTALS	32.8	31.0	17.8	4.4	.3	.2	.1					100.0	5.8	6.0

TOTAL NUMBER OF OBSERVATIONS 918

C - 4 - 7

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: JAN HOURS: 21-23

		rs	T TO UI	C: - 1					MONTH	: JAN	HOUR	S: 21-23	,	
***********	• • • • • • •		•••••	• • • • • • •	WIND S	PEED IN	KNOTS	•••••		•••••	•••••	• • • • • • •	•••••	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL	mean Wind	MEDIAN WIND
(N) 350-010	.8	.4	• • • • • •	•••••	•••••			•••••	•••••	•••••	•••••	1.2	4.2	3.0
020-040	.5	.8	.3	.2								1.9	7.5	6.0
050-070	4.8	4.8	2.6	.5	.1							12.9	6.5	6.0
(E) 080-100	5.2	2.6	.5	.2								8.6	4.7	4.0
110-130	.5											.5	1.8	2.0
140-160	.4	.1										.5	3.0	4.0
(8) 170-190	1.1	.9	.5	.1								2.6	6.0	5.0
200-220	1.6	2.3	2.5	.9								7.3	8.7	8.0
230-250	7.7	14.9	7.6	2.1	.3	.1						32.8	7.9	7.0
(W) 260-280	5.0	3.3	2.0	.7		.1	.1					11.1	6.5	5.0
290-310	1.6	.8	.1	.2	.2							2.9	6.1	4.0
320-340	.9	.1	.3									1.3	5.7	4.0
VARIABLE	 .1	• • • • • •				•••••	• • • • • • •		•••••	•••••	•••••	5	11.8	12.0
VARIABLE	''		• 4	.2								.5	11.0	12.0
CALM	//////	//////	///////	//////	'//////	'//////	///////	///////	'//////	//////	'//////	15.8	/////	/////
TOTALS	30.2	31.0	16.6	5.1	.6	.2	.1					100.0	5.9	6.0

TOTAL NUMBER OF OBSERVATIONS 918

C - 4 - 8

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM BOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: JAN HOURS: ALL

		LS	T TO UI	c: - 1					MONTE	: JAN	HOUR	S: ALL		
•••••	• • • • • • • •	• • • • • •	•••••	•••••	WIND 8	PEED IN	KNOTS	• • • • • • •	•••••	•••••	•••••	• • • • • • •	•••••	• • • • • • •
DIRECTION	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL	MEAN	MEDIAN
(DEGREES)		• • • • • •	•••••	•••••	•••••	•••••		• • • • • • •	•••••	•••••	•••••	*	WIND	WIND
(N) 350-010	.7	.7	.3	••••••	•••••	•••••	• • • • • •	• • • • • • •	•••••	•••••	•••••	1.6	5.9	6.0
020-040	.7	.8	.3	.1								1.9	6.4	6.0
050-070	3.7	4.2	2.2	.6	.0							10.8	6.8	6.0
(E) 080-100	5.6	3.2	.9	.2								9.9	4.9	4.0
110–130	1.1	.1										1.2	2.8	2.0
140-160	.3	.1	.1	.0								.5	5.1	4.0
(8) 170-190	.8	.7	.6	.1								2.1	6.6	6.0
200-220	2.0	3.7	2.7	.8	.2							9.4	8.5	8.0
230–250	7.5	13.6	8.6	1.9	.2	.0	.0					31.7	7.8	8.0
(W) 260-280	5.2	3.9	1.8	.4	.0	.0	.0					11.3	5.9	5.0
290–310	2.5	.9	.7	.1	.0	.0						4.3	5.2	3.5
320-340	1.2	.5	.2	.0								1.9	4.2	3.0
VARIABLE	.0	.1	.3	.0	.0	•••••	• • • • • •	• • • • • • •	•••••	•••••	•••••	5	11.3	10.5
CALM	1111111	//////	//////	///////	//////	///////	//////	///////	///////	//////	///////	12.8	/////	/////
TOTALS	31.3	32.5	18.7	4.2	.4							100.0	5.9	6.0

OPERATING LOCATION "A" PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED USAFETAC, ASHEVILLE NC FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: JAN HOURS: ALL

CATEGORY A:	CEILING GE 200	BUT LESS THAN 1500	FEET WITH VISIBILITY	GE 1/2 MILE	(0800 METERS).
		AND/OR			

VISIBILITY GE 1/2 MILE (0800 METERS) BUT LESS THAN 3 MILES (4800 METERS) WITH CEILING GE 200 FEET.

	• • • • • • • •			•••••										
DIRECTION	1 1-4	5-9	10-14	15-19		SPEED IN 25-29		35-39	40-49	50-64	GE 65	TOTAL	MEAN	MEDIAN
(DEGREES)		•••••							•••••	•••••	•••••	*	WIND	WIND
(N) 350-010	.4	.4	.1	•••••	• • • • • •	• • • • • • • •	• • • • • • •	• • • • • •	• • • • • •	•••••	•••••	.9	5.8	5.5
020-040	.7	.5	.2									1.4	5.1	4.5
050-070	2.9	3.7	1.1	.2								8.0	5.7	5.0
(E) 080-100	5.6	2.4	.6	.1								8.7	4.3	4.0
110-130	1.1	.1										1.2	2.7	2.0
140-160	.2	.2	.1	.0								.5	6.6	5.0
(S) 170-190	.8	.7	.9	.2								2.6	7.6	8.0
200-220	2.4	6.0	4.7	1.3	.4							14.7	8.9	8.0
230-250	7.9	18.2	11.3	2.6	.3							40.4	8.2	8.0
(W) 260-280	4.1	3.1	.9	.2	.1							8.4	5.5	5.0
290-310	1.2	.5	.3			.0						2.1	4.9	4.0
320-340	.4	.3	.2	.0								.9	6.2	5.5
VARIABLE	 	•••••	•••••	•••••	•••••	• • • • • • • •	• • • • • • •	• • • • • •	••••••	•••••	•••••	•••••	• • • • • •	•••••
CALM	1111111	//////	///////	///////	//////	/////////	//////	//////	//////	///////	///////	10.2	/////	/////
TOTALS	27.7	36.1	20.4	4.6	.8							100.0	6.4	7.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: FEB HOURS: 00-02

		LS	T TO UI	C: - 1				•	MONTE	: FRB	HOUR	8: 00-02	:	
• • • • • • • • • • • • •	• • • • • • • •	• • • • • •	•••••	• • • • • •	WIND 8	SPEED IN	KNOTS	• • • • • •		•••••	•••••	• • • • • • •	•••••	• • • • • • •
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50~64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
(N) 350-010	1.6	1.2		• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	•••••	• • • • • • •	•••••	3.2	5.0	4.0
(4) 550-010	1	1.2	••									3.2	3.0	.•••
020-040	1.3	.7	.7									2.7	6.3	6.0
050-070	9.2	9.5	4.4	.5								23.6	6.2	6.0
030-070	'	3.3	7.7	••								23.0	0.2	0.0
(E) 080-100	7.9	5.5	3.2	.5								17.1	5.8	5.0
110-130	.6											.6	2.6	3.0
140-160	.1											.1	1.0	1.0
(8) 170-190	1.3	.2	.4									1.9	4.1	3.0
200-220	.9	1.9	1.2	.8	.4							5.2	9.5	8.5
230-250	3.9	6.9	2.9	1.1	.4							15.2	7.5	7.0
(W) 260-280	5.1	2.9	.8									8.8	4.5	4.0
290-310	2.5	.7	.1									3.3	3.4	2.0
		_												
320-340	1.3	.2										1.5	3.2	2.0
	: • • • • • • •													
VARIABLE			.2	.1								-4	12.7	12.0
CALM	1111111	//////	///////	///////	//////	///////	//////	///////	///////	///////	//////	16.5	/////	/////
TOTALS	35.7	29.7	14.3	3.0	.8							100.0	5.1	5.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: FEB HOURS: 03-05

••••••	• • • • • • • •	• • • • • •	• • • • • •	• • • • • •	WIND S	PEED IN	KNOTS	•••••	· • • • • • •	•••••	• • • • • • •	• • • • • • •	• • • • • •	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
(N) 350-010	.9	.7	.7	•••••	•••••	• • • • • • •	• • • • • •	• • • • • • •	******	•••••	• • • • • • • •	2.4	6.9	6.5
020-040	1.5	1.6	.7									3.9	5.6	5.0
050-070	8.6	10.8	4.4	.4								24.1	6.3	6.0
(E) 080-100	8.2	4.2	3.2	.5								16.1	5.8	4.0
110-130		.1										.1	7.0	7.0
140-160	.4											.4	1.7	2.0
(8) 170-190	.4	.7	.1									1.2	5.9	7.0
200-220	.9	1.6	1.3	.4	.2							4.5	9.2	9.0
230-250	5.2	6.2	3.7	.9	.5							16.5	7.8	7.0
(W) 260-280	4.1	1.9	1.2									7.2	5.2	4.0
290-310	2.5	.6	.2									3.3	3.1	2.0
320-340	1.3	.7	.2									2.2	4.6	4.0
	<u> </u>	• • • • • •									• • • • • • • •			
VARIABLE		.1	.5									.6	12.0	14.0
CALM	//////	//////	//////	///////	//////	///////	//////	'//////	//////	//////	///////	17.6	/////	/////
TOTALS	34.0	29.2	16.2	2.2	.7							100.0	5.3	6.0

TOTAL NUMBER OF OBSERVATIONS 849

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PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

		LS	T TO UT	C: - 1	Month: FEB H						HOUR	URS: 06-08				
••••••		• • • • • • •	•••••	• • • • • •	WIND S	PEED IN	KNOTS		•••••	•••••	•••••	• • • • • • •	•••••	• • • • • •		
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND		
(N) 350-010	.2	1.1	.6	• • • • • •	•••••	•••••	•••••	•••••	•••••	•••••	•••••	1.9	7.2	7.5		
020-040	2.0	2.0	.6									4.6	5.5	5.0		
050-070	6.4	10.0	4.7	.2								21.3	6.7	6.0		
(E) 080-100	7.4	4.5	3.9	.2								16.0	6.1	6.0		
110-130	.7											.7	2.7	2.5		
140-160		.2										.2	7.0	7.0		
(S) 170-190	.5	.4	.1									.9	5.4	4.5		
200-220	.9	2.0	2.0	.5								5.4	8.5	8.0		
230-250	4.2	6.0	2.7	1.1	.2							14.3	7.7	8.0		
(W) 260-280	4.7	3.1	1.5									9.3	5.7	4.0		
290-310	2.1	.6	.2									2.9	3.9	3.0		
320-340	2.1	.4	.1									2.6	3.2	2.0		
VARIABLE	 	.4	.6	•••••	•••••		•••••	• • • • • •	•••••	•••••	•••••	.9	10.6	11.0		
CALM	11111111	//////	//////	//////	//////	///////	///////	///////	///////	///////	//////	18.8	/////	/////		
TOTALS	31.2	30.7	17.0	2.0	.2							100.0	5.3	6.0		

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: FEB HOURS: 09-11

• • • • • • • • • • • • • • • • • • • •						PEED IN					•••••		•••••	•••••	
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND	
(N) 350-010	1.2	1.5	.5	••••••	•••••	• • • • • • •	•••••	•••••	•••••	•••••	•••••	3.2	5.6	7.0	
020-040	1.1	1.8	.6									3.4	6.4	6.0	
050-070	2.9	9.7	4.9	1.3								18.8	8.1	8.0	
(E) 080-100	6.9	8.0	6.5	.6								22.0	7.1	7.0	
110-130	.5		.1									.6	4.8	4.0	
140-160	.2											.2	2.0	2.0	
(8) 170-190	.2	.4										.6	5.0	6.0	
200-220	.6	2.4	2.1	.5								5.5	9.1	9.0	
230-250	5.4	7.3	4.1	1.1	.1	.2						18.3	7.5	7.0	
(W) 260-280	4.6	4.1	.9	.1								9.8	5.3	5.0	
290-310	1.6	1.4	.4									3.4	5.1	5.0	
320-340	1.1	.8										1.9	4.3	4.0	
VARIABLE		.5	.4	•••••	•••••	• • • • • • •	•••••	•••••	•••••	•••••	•••••	.8	9.7	9.0	
CALM	1111111	//////	//////	///////	//////	///////	//////	///////	///////	'//////	///////	11.4	//////	/////	
TOTALS	26.3	37.9	20.5	3.6	.1	.2						100.0	6.3	7.0	

TOTAL NUMBER OF OBSERVATIONS 849

C - 4 - 14

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: FEB HOURS: 12-14

		LS	T TO UT	C: - 1					MONTE	: FEB	HOUR	S: 12-14	ļ.	
•••••	• • • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	•••••	• • • • • • •		• • • • • • •
						PEED IN								
DIRECTION	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35~39	40-49	50-64	GE 65	TOTAL	MEAN	MEDIAN
(Degrees)	I											*	WIND	WIND
(N) 350-010	.4	1.2	.6	• • • • • • •	•••••		• • • • • • •	• • • • • • •	• • • • • • • •	• • • • • • •	•••••	2.1	7.9	7.5
(#) 550-010		1.2	.0									2.1	7.5	,.,
020-040	1.4	1.4	.5									3.3	6.1	6.0
050-070	2.9	8.0	6.0	.7								17.7	8.1	8.0
	1													
(E) 080-100	4.6	8.7	7.9	.9	.1							22.3	8.1	8.0
110-130	1.5	1.2	.6									3.3	5.7	5.0
110-150		***										3.3	3.,	3.0
140-160	.8	.4										1.2	3.5	2.5
]													
(S) 170-190	.6	.6	.2									1.4	5.5	5.5
	_													
200–220	.7	2.1	1.6	.9								5.4	9.6	9.0
230-250	3.8	7.4	4.8	.9	.1							17.1	7.8	7.0
230-230	3.0	7.4	4.0	. 9	• •							17.1	7.0	7.0
(W) 260-280	5.3	4.6	2.1	.7								12.7	6.3	5.5
•	l													
290-310	2.4	1.5	.9	.1								4.9	5.9	5.5
320-340	.9	.8	.4									2.1	5.7	5.0
	1													
VARIABLE		 8.	.7	.2	•••••	• • • • • • •	•••••	• • • • • • •	• • • • • • •	• • • • • • •	•••••	1.8	10.6	10.0
***************************************			• *	••								1.0	10.0	10.0
CALM	11111111	//////	//////	///////	//////	///////	///////	///////	///////	///////	///////	4.7	/////	/////
TOTALS	25.3	38.7	26.3	4.4	.2							100.0	7.2	7.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: FEB HOURS: 15-17

• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	• • • • • •	• • • • • • •	•••••	שדאים כ	PEED IN	ENICYTICS.	• • • • • •	•••••	• • • • • •	• • • • • • • • •	• • • • • •	•••••	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		25-29		35-39	40-49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
(N) 350-010	.9	1.2	.8	•••••	• • • • • •	••••••	• • • • • • •	• • • • • • •	•••••	• • • • • •	• • • • • • •	2.9	6.7	7.0
020-040	1.8	3.3	.2	.1								5.4	6.0	6.0
050-070	3.1	10.8	5.3	.2								19.4	7.6	8.0
(E) 080-100	5.2	6.5	4.9	1.2								17.8	7.6	8.0
110-130	2.4	1.1	.4	.1								3.9	4.8	4.0
140-160	1.1	.1	.1									1.3	3.3	2.0
(S) 170-190	.9	.6	.2									1.8	5.1	4.0
200-220	2.8	2.7	1.2	.7								7.4	6.9	7.0
230-250	5.1	6.4	4.4	1.2	.1							17.1	7.3	7.0
(W) 260-280	4.2	4.0	2.0	.1								10.4	6.0	5.5
290-310	1.4	2.2	1.3	.2								5.2	7.2	7.5
320-340	.9	.7										1.6	4.4	4.0
• • • • • • • • • • • • • • • • • • • •	ļ		• • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • •				•••••					
VARIABLE	.1	.8	.1	.1								1.2	8.3	8.0
CALM	///////	//////	///////	///////	//////	///////	//////	///////	//////	//////	'//////	4.6	/////	/////
TOTALS	29.9	40.4	20.9	3.9	.1							100.0	6.6	7.0

320-340 1.4 .4 .2

TOTALS 34.9 35.9 14.1 1.6 .1

VARIABLE

CALM

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY LST TO UTC: - 1									DO OF R		JAN 80 - RS: 18-20		9	
	• • • • • • • •	• • • • • •	•••••	•••••	WIND 8	SPEED IN	KNOTS	• • • • • • •	•••••	•••••	• • • • • • •		• • • • • •	
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		25-29		35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	2.4	.9	.2		•••••	• • • • • • •	• • • • • • •	• • • • • • •	•••••	• • • • • •	• • • • • • •	3.5	4.0	3.0
020-040	2.8	2.6	.2									5.7	4.8	4.5
050-070	5.1	10.2	3.9									19.2	6.6	6.0
(E) 080-100	6.4	8.6	3.5	.5								19.0	6.6	6.0
110-130	.8	.1										.9	2.4	2.0
140-160	.8	.6										1.4	3.8	3.5
(S) 170-190	1.2	.1										1.3	2.5	2.0
200-220	2.1	1.8	.7	.6								5.2	6.8	5.0
230-250	6.0	6.9	3.4	.4	.1							16.8	6.8	6.0
(W) 260-280	3.1	2.1	1.4	.1								6.7	5.9	6.0
290-310	2.8	1.5	.2									4.6	4.0	3.0

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TOTAL NUMBER OF OBSERVATIONS 849

2.0 4.5 4.0

.5 11.3 12.0

100.0 5.3 6.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED

FROM HOURLY OBSERVATIONS STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 MONTH: FEB HOURS: 21-23 LST TO UTC: - 1 WIND SPEED IN KNOTS 1-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-49 50-64 GE 65 TOTAL MEAN MEDIAN DIRECTION (DEGREES) * WIND WIND (N) 350-010 2.1 3.5 3.5 020-040 1.9 .9 .5 3.3 4.9 4.0 050-070 6.4 9.3 4.2 .2 20.1 6.6 6.0 (E) 080-100 7.5 7.7 2.9 6.0 .6 18.7 6.1 110-130 1.6 2.6 3.0 .1 1.8 140-160 . 4 .2 .6 3.6 2.0 (8) 170-190 . 5 .7 .2 1.4 5.4 5.0 200-220 1.9 1.9 1.4 .2 5.4 7.0 6.0 230-250 4.6 6.7 3.3 7.0 .5 15.1 7.0 (W) 260-280 5.1 2.8 1.3 .1 9.3 5.2 4.0 290-310 2.4 .9 .1 3.4 4.2 4.0 320-340 .1 3.2 2.0 VARIABLE CALM TOTALS 35.0 32.5 14.1 1.6 100.0 5.0 6.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 MONTH: FEB HOURS: ALL WIND SPEED IN KNOTS DIRECTION | 1-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-49 50-64 GE 65 TOTAL MEAN MEDIAN (DEGREES) WIND WIND (N) 350-010 1.2 1.1 .5 2.8 5.7 5.0 020-040 1.7 1.8 .5 ٠.0 4.0 5.6 5.0 050-070 5.6 9.8 4.7 20.5 7.0 7.0 . 4 (E) 080-100 6.8 6.7 18.6 6.0 4.5 .6 -0 6.7 110-130 1.0 .1 .0 4.3 4.0 140-160 .5 .2 .0 .7 3.5 2.0 (S) 170-190 .7 .5 .2 1.3 4.8 4.0 200-220 1.4 2.0 1.4 5.5 8.2 8.0 .6 .1 230-250 4.8 6.7 3.7 .0 16.3 7.4 7.0 .9 .2 (W) 260-280 4.5 3.2 1.4 .1 9.3 5.0 290-310 2.2 1.2 .4 .0 3.9 4.8 4.0 320-340 1.2 .5 .1 4.2 4.0 VARIABLE .0 .3 .4 .1 CALM TOTALS 31.6 34.3 17.9 2.7 .3 100.0 5.7 6.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

LST TO UTC: - 1

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

MONTH: FEB HOURS: ALL

CATEGORY A: CEILING GE 200 BUT LESS THAN 1500 FEET WITH VISIBILITY GE 1/2 MILE (0800 METERS).

AND/OR

VISIBILITY GE 1/2 MILE (0800 METERS) BUT LESS THAN 3 MILES (4800 METERS) WITH CEILING GE 200 PEET.

DIRECTION 1-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-49 50-64 GE 65 TOTAL ME (DEGREES)	
	.0 4.0
(N) 350-010 1.5 .8 .4 2.7 5	
l	4 70
020-040 1.6 1.7 1.0 4.3 6	
050-070 4.7 7.1 3.1 15.0 6	.5 6.0
(E) 080-100 5.8 5.5 2.2 .0 13.6 5	.6 5.0
110-130 1.2 .3 .2 1.8 4	.2 3.0
140~160 .4 .4 .8 4	.3 4.0
(8) 170-190 .8 .6 .1 1.5 4	.7 4.0
200-220 1.5 3.5 2.4 1.2 .1 8.7 8	.8 8.0
230-250 5.1 10.8 7.8 1.1 .2 25.0 8	.1 8.0
(W) 260-280 3.6 3.3 2.2 .2 9.3 6	.5 6.0
290-310 2.2 .7 .1 .1 3.1 4	.3 3.0
320~340 .9 .2 1.1 3	.5 3.0
VARIABLE	• • • • • • • • •
CALM ////////////////////////////////////	////////
TOTALS 29.3 34.9 19.5 2.6 .3 100.0 5	.9 6.0

TOTAL NUMBER OF OBSERVATIONS 2037

C - 4 - 20

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: MAR HOURS: 00-02

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DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL %	MRAN WIND	MEDIAN WIND
(N) 350-010	1.9	.5	.2	•••••	•••••	•••••		•••••	•••••	••••••	••••••	2.7	3.8	3.0
020-040	2.3	1.0	.1									3.3	4.0	4.0
050-070	5.4	3.9	1.3	.1								10.6	5.2	4.0
(E) 080-100	5.5	1.7	.3									7.5	3.9	3.0
110-130	.6	.1										.8	3.4	4.0
140-160	1.0											1.0	2.6	2.0
(8) 170-190	1.1	1.0										2.0	4.3	4.0
200-220	2.0	4.2	2.0	.2	.3							8.8	8.0	8.0
230-250	5.4	10.5	8.2	.6								24.7	7.6	7.0
(W) 260-280	5.6	2.5	1.2	.1								9.4	4.7	4.0
290-310	2.6	1.0	.5	.1								4.2	4.6	3.0
320-340	1.3	.3	.1	.1								1.8	4.5	3.0
VARIABLE		.1		• • • • • • •	•••••	•••••	•••••			• • • • • •	•••••	.1	9.0	9.0
CALM	1111111	//////	///////	///////	//////	///////	//////	///////	///////	//////	///////	23.0	/////	/////
TOTALS	34.7	26.8	13.9	1.2	.3							100.0	4.5	5.0

TOTAL NUMBER OF OBSERVATIONS 930

C - 4 - 21

CALM

TOTALS

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: MAR HOURS: 03-05 •••••• WIND SPEED IN KNOTS 1-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-49 50-64 GE 65 TOTAL MEAN MEDIAN DIRECTION (DEGREES) WIND WIND (N) 350-010 1.7 .9 .3 2.9 4.7 4.0 020-040 2.4 1.3 3.7 3.8 3.0 050-070 6.6 3.0 1.2 10.8 4.6 4.0 (E) 080-100 5.7 1.5 .4 .2 7.8 3.9 3.0 110-130 . 1 .1 .2 6.0 6.0 140-160 .9 2.5 2.0 .9 (S) 170-190 .6 .5 .2 .1 1.5 5.8 5.0 200-220 2.7 4.3 3.3 .8 7.9 8.0 230-250 6.1 12.7 6.2 1.0 .1 26.1 7.4 7.0 (W) 260-280 5.4 1.3 1.4 .2 8.3 4.9 3.0 .9 .3 290-310 2.4 .1 3.7 4.9 4.0 320-.40 2.0 2.0 . VARIABLE .1 16.0 16.0

TOTAL NUMBER OF OBSERVATIONS 930

35.1 26.5 13.3 2.5

100.0 4.6 5.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 MONTH: MAR HOURS: 06-08 LST TO UTC: - 1 WIND SPEED IN KNOTS 1-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-49 50-64 GE 65 TOTAL MEAN MEDIAN DIRECTION (DEGREES) * WIND WIND (N) 350-010 1.2 .8 .1 2.0 4.5 3.0 020-040 1.6 3.1 4.7 5.0 1.4 .1 050-070 7.0 3.4 1.6 12.2 5.0 .1 (E) 080-100 5.6 1.8 .5 8.0 4.0 3.0 110-130 .4 . 4 2.0 2.0 140-160 .2 .2 . 4 4.0 3.5 (S) 170-190 1.7 1.0 .1 2.8 5.2 5.0 200-220 1.7 4.8 3.2 .4 .1 10.3 8.4 230-250 5.6 10.4 8.1 1.0 .3 25.4 8.0 8.0 1.5 (W) 260-280 5.1 2.3 8.9 5.0 .1 4.0 290-310 2.8 1.1 .3 .2 4.4 4.7 3.0 320-340 2.0 VARIABLE .2 14.0 14.0 CALM TOTALS 33.1 28.4 15.7 1.8 100.0 5.0 6.0

TOTAL NUMBER OF OBSERVATIONS 930

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PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: MAR HOURS: 09-11

		פת	1 10 01	C: - 1					MONTE	: MAK	BOUR	D: U9-11	•	
••••••	• • • • • • • •	• • • • • • •	•••••	•••••	WIND S	PEED IN	KNOTS	• • • • • • •	• • • • • •	• • • • • • •	•••••	•••••	•••••	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	.3	.9	.1	•••••		•••••	• • • • • •	• • • • • • •	••••••	•••••	•••••	1.3	6.4	6.5
020 -040	.8	1.3	.3									2.4	6.2	6.0
050-070	3.7	4.0	2.7	.4								10.8	6.8	7.0
(E) 080-100	7.2	5.2	.8									13.1	4.8	4.0
110-130	1.2	.5										1.7	3.9	3.5
140-160	.8	.1	.1	.1								1.1	5.6	4.0
(S) 170-190	1.3	.8	.1	.1								2.3	5.0	4.0
200-220	1.5	4.5	5.1	1.6	.1							12.8	9.5	10.0
230-250	5.8	9.4	10.2	2.5	.3							28.2	8.9	9.0
(W) 260-280	4.3	3.0	2.3	.1								9.7	6.0	5.0
290-310	2.0	2.4	.1	.1								4.6	5.0	5.0
320-340	1.2	1.0	.3	.1								2.6	5.8	5.5
VARIABLE	.1	 .2	5	1	•••••	•••••		•••••	•••••	•••••	•••••	1.0	9.9	10.0
CALM	1111111	//////	///////	///////	///////	///////	//////	///////	///////	///////	''''	8.6	/////	//////
TOTALS	30.2	33.3	22.6	5.1	.4							100.0	6.6	7.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: MAR HOURS: 12-14

		LS	T TO UI	: - 1					MONTE	: MAR	HOUR	S: 12-1	1	
•••••	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	WIND C	PEED IN	KINOUS .	•••••	•••••	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24		30-34	35-39	40-49	50-64	GR 65	TOTAL	MEAN WIND	MEDIAN WIND
		• • • • • • •	•••••	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	•••••	•••••	• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • • • • • • • • • • • • • • •
(N) 350-010	.6	1.2	.4									2.3	6.5	6.0
020-040	.2	1.5	.4									2.2	7.6	7.0
050-070	1.9	3.7	1.4	.2								7.2	7.0	7.0
(E) 080-100	4.3	4.9	1.3									10.5	5.5	5.0
110-130	2.7	1.2										3.9	3.8	4.0
140-160	1.3	.9	.1									2.3	4.1	3.0
(8) 170-190	.9	1.4	.6					•				2.9	6.4	7.0
200-220	1.8	5.1	4.3	2.3	.2	.1						13.8	10.0	9.5
230-250	3.1	9.4	11.5	4.2	.2							28.4	9.8	10.0
(W) 260-280	2.8	5.3	3.2	.2		.1						11.6	7.6	7.5
290-310	1.6	3.2	1.3									6.1	6.7	6.0
320-340	1.7	1.4	.1	.1								3.3	5.1	4.0
VARIABLE	.1	1.5	.6	.1	.1	• • • • • • •	•••••	• • • • • •	•••••	•••••		2.5	9.4	9.0
CALM	1111111	//////	//////	///////	//////	///////	//////	///////	///////	///////	///////	3.1	/////	/////
TOTALS	23.0	40.7	25.2	7.1	.5	.2						100.0	7.7	8.0

TOTAL NUMBER OF OBSERVATIONS 930

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: MAR HOURS: 15-17

		LS	T TO UI	:C: - 1					MONTE	: MAR	HOUR	8: 15-1	,	
***************************************	• • • • • • • •	•••••		•••••	WIND 8	SPEED IN	KNOTS	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	•••••	• • • • • •	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	1.0	1.4	.6	•••••	• • • • • •	•••••	•••••	•••••	• • • • • • •	• • • • • •	• • • • • • •	3.0	6.3	6.0
020-040	.9	1.1	.6	.1								2.7	6.8	6.0
050-070	1.4	4.5	1.4									7.3	6.9	7.0
(E) 080-100	3.3	4.3	1.2									8.8	5.7	6.0
110-130	1.1	.9	.2									2.2	4.8	4.5
140-160	.6	.6										1.3	4.4	4.0
(S) 170-190	1.7	2.6	1.4									5.7	6.5	6.0
200-220	1.7	5.1	3.7	.9	.3	.1						11.7	9.1	8.0
230-250	3.4	9.4	10.8	2.8	.2							26.6	9.3	10.0
(W) 260-280	2.8	5.2	2.4	.2		.2						10.8	7.5	8.0
290-310	3.2	4.4	1.4	.1								9.1	6.2	6.0
320-340	2.5	1.9	.5									4.9	5.3	4.5
VARIABLE	: 	6	6	1	• • • • • •	• • • • • • •	• • • • • •	•••••	• • • • • • •	• • • • • • •	• • • • • • •	1.4	9.8	10.0
CALM	1111111	//////	//////	///////	//////	///////	//////	///////	///////	//////	///////	4.5	/////	//////
TOTALS	23.6	42.0	24.8	4.2	.5	.3						100.0	7.2	7.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: MAR HOURS: 18-20

		100	1 10 01	· - 1					PONTI	· PPW	ноон	J. 10-20	,	
	• • • • • • • •	• • • • • •	•••••	•••••	WIND 8	PEED IN	KNOTS	•••••	•••••	•••••	•••••	• • • • • • • •	•••••	• • • • • • •
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50~64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	2.7	1.5	•••••	•••••	•••••	•••••	•••••	•••••	•••••	• • • • • • •	•••••	4.2	4.4	4.0
020-040	2.2	1.5	.2									3.9	4.8	4.0
050-070	5.2	2.2	1.0									8.3	4.8	4.0
(E) 080-100	4.5	3.0	.3									7.9	4.2	4.0
110-130	1.7	.3										2.0	2.5	2.0
140-160	.9	.4										1.3	4.1	3.0
(8) 170-190	2.8	2.2	.2									5.2	4.6	4.0
200-220	3.1	4.0	2.5	.4	.3							10.3	7.4	6.0
230-250	5.7	10.7	5.9	1.4	.5							24.2	8.0	8.0
(W) 260-280	3.4	2.8	1.1	.6	.1							8.1	6.6	5.0
290-310	3.3	2.4	.4	.1								6.2	4.9	4.0
320-340	2.4	.6										3.0	3.6	4.0
***********	! 					•••••				• • • • • • •		• • • • • • • • •		•••••
VARIABLE]	.1	.1									.2	10.0	10.0
CALM	1111111	//////	//////	///////	'//////	'//////	///////	'//////	///////	//////	///////	15.2	/////	/////
TOTALS	37.9	31.7	11.7	2.5	.9							100.0	5.1	5.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: MAR HOURS: 21-23

		LS	T TO UI	:: - 1					MONT	i: MAR	HOUR	8: 21-23	3	
************	• • • • • • • •	• • • • • •	•••••		WIND S	SPEED IN	KNOTS	• • • • • • •	• • • • • • •		•••••	•••••	• • • • • •	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	1.8	 .6	1	•••••	• • • • • •	•••••	• • • • • •	••••••	• • • • • • •	• • • • • • •	•••••	2.6	4.0	3.0
(11) 330-010	•••		••									2.0	4.0	3.0
020-040	2.3	1.7	.6									4.6	5.1	5.0
050-070	5.5	3.0	.5									9.0	4.5	4.0
(E) 080-100			_											2.0
(E) 080-100	5.9	2.5	.3	.1								8.8	3.8	3.0
110-130	1.2	.1										1.3	2.0	1.5
140-160	1.2	.1										1.3	3.0	3.0
(S) 170-190	1.7	.6	.1									2.5	3.6	2.0
(8) 170-190	1.,	.0	•1									2.5	3.0	3.0
200-220	1.0	5.1	2.0	.9	.4							9.4	9.0	8.0
230-250	6.1	9.7	5.4	1.6	.2							23.0	7.6	7.0
(W) 260-280	3.8	2.7	.8	.4	.1							7.7	5.9	5.0
290-310	3.3	1.3	.4	.2								5.3	4.6	3.0
320-340	1.5	.4										1.9	3.1	2.0
	! • • • • • • • • • • • • • • • • • • •	• • • • • •		• • • • • •		• • • • • •		• • • • • • •						
VARIABLE			.2									.2	11.5	11.5
CALM	//////	//////	'//////	'//////	'//////	'//////	//////	'//////	///////	///////	'//////	22.4	/////	//////
TOTALS	35.3	27.8	10.4	3.2	.7					,		100.0	4.6	5.0
			m-	YEAT MILE	™ • • • • • • • • • • • • • • • • • • •	ODGEDUA	TTONE	930		•				

TOTAL NUMBER OF OBSERVATIONS 930

OPERATING LOCATION "A" PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED USAFFTAC, ASHEVILLE NC FROM HOURTY ORDERED

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 MONTH: MAR HOURS: ALL

LST TO UTC: - 1

WIND SPEED IN KNOTS

					WIND S	PEED IN	KNOTS							
DIRECTION	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL	MEAN	MEDIAN
(Degrees)		•••••		•••••		•••••					•••••	8	WIND	WIND
(N) 350-010	1.4	1.0	.2	•••••	• • • • • • •	•••••	•••••	• • • • • • •		• • • • • • •		2.6	4.9	4.0
020-040	1.5	1.4	.3	.0								3.2	5.2	5.0
050-070	4.6	3.5	1.4	.1								9.5	5.5	5.0
(E) 080-100	5.3	3.1	.6	.0								9.1	4.6	4.0
110-130	1.1	.4	.0									1.6	3.6	3.0
140-160	.8	.3	.0	.0								1.2	3.9	3.0
(8) 170-190	1.4	1.3	.3	.0								3.1	5.3	5.0
200-220	1.9	4.6	3.3	.9	.2	.0						11.0	8.7	8.0
230-250	5.2	10.3	8.3	1.9	.2							25.8	8.4	8.0
(W) 260-280	4.1	3.1	1.7	.3	.0	.0						9.3	6.1	5.0
290-310	2.7	2.1	.6	.1								5.5	5.3	5.0
320-340	1.5	.8	.1	.0								2.4	4.5	4.0
********	! • • • • • • • • • • • • • • • • • • •					• • • • • • •				• • • • • • •		<u>.</u>		•••••
VARIABLE	.0	.3	.3	.1	.0							.7	10.0	10.0
CALM	,,,,,,,	//////	//////	///////	//////	///////	//////	///////	///////	//////	///////	15.0	/////	/////
TOTALS	31.5	32.2	17.1	3.4	.4							100.0	5.7	6.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: MAR HOURS: ALL

LST TO UTC: - 1 MONTH: MAK HOURS: ALL

CATEGORY A: CEILING GE 200 BUT LESS THAN 1500 FEET WITH VISIBILITY GE 1/2 MILE (0800 METERS).

AND/OR

VISIBILITY GE 1/2 MILE (0800 METERS) BUT LESS THAN 3 MILES (4800 METERS) WITH CEILING GE 200 FEET.

•••••	• • • • • • • •	• • • • • •	•••••	•••••	WIND S	PEED IN	KNOTS		•••••			• • • • • • • •	•••••	•••••
DIRECTION	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL	MEAN	MEDIAN
(DEGREES)	 	• • • • • •	• • • • • • •	•••••	• • • • • • •	•••••	• • • • • •	•••••	• • • • • • •	•••••	• • • • • • •	*	WIND	WIND
(N) 350-010	.9	1.3	.1	•••••	•••••	•••••	• • • • • • •	•••••	•••••		•••••	2.3	5.2	5.0
020-040	1.6	1.8	.2	.0								3.7	5.4	5.0
050-070	3.9	2.3	.8	.1								7.2	5.2	4.0
(E) 080-100	4.3	2.6	.1									7.0	3.8	3.0
110-130	1.1	.2										1.3	3.0	3.0
140-160	1.0	.3										1.3	3.5	3.0
(8) 170-190	1.0	1.4	.3									2.6	5.6	5.0
200-220	1.9	6.2	5.9	1.6	.2	•0						15.9	9.4	9.0
230-250	5.4	15.4	12.3	1.9	.2							35.3	8.5	8.0
(W) 260-280	3.0	2.4	1.9	.2								7.5	6.4	6.0
290-310	1.6	1.1	.4	.1								3.3	5.5	5.0
320-340	9	.4	.0	.1								1.5	4.9	4.0
VARIABLE		• • • • • •	• • • • • • •	•••••	• • • • • •	•••••	• • • • • •	•••••	• • • • • •		•••••	•••••	•••••	•••••
CALM	1111111	//////	///////	//////	//////	///////	//////	1111111	///////	1111111	///////	11.3	//////	/////
TOTALS	26.6	35.4	22.0	4.0	-4							100.0	6.4	7.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: APR HOURS: 00-02

		LS	T TO UI	:: - 1					MONTE	: APR	HOUR	s: 00-02	2	
•••••	• • • • • • •	• • • • • •	•••••	• • • • • • •	WYND C	PEED IN	·······	• • • • • • •	•••••	• • • • • •		• • • • • • •	• • • • • •	
Direction (Degrees)	1-4	5-9	10-14	15-19		25-29		35-39	40-49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
************		• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	•••••	• • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •
(N) 350-010	2.1	2.6	.7									5.3	5.6	5.0
020-040	2.0	2.3	.8	.1								5.2	5.7	6.0
050-070	7.7	6.6	1.7	.3								16.2	5.4	5.0
(E) 080-100	5.9	2.0	.6	.1								8.6	4.0	3.0
110-130	.8	.1										.9	2.5	2.0
140-160	.3											.3	3.0	3.0
(S) 170-190	.9	.4	.1									1.4	4.7	4.0
200-220	2.0	3.0	1.0	.1								6.1	6.2	6.0
230-250	4.6	3.8	1.4		.1							9.9	5.4	5.0
(W) 260-280	6.4	2.4	.2									9.1	3.5	3.0
290-310	3.3	.8										4.1	3.3	3.0
320-340	1.8	.2		.1								2.1	3.5	3.0
VARIABLE		 .1	2	2	•••••	• • • • • •	•••••	•••••	• • • • • •	• • • • • •	•••••	6	12.8	12.0
VARIABLE		•1	• • •	• • •								.0	14.0	12.0
CALM	1111111	//////	///////	///////	//////	'//////	//////	'//////	'//////	///////	///////	30.1	/////	/////
TOTALS	37.8	24.3	6.7	.9	.1							100.0	3.4	4.0
			mc	VTD B 7 B 27 784	772 AT	000000	m: one	000						

TOTAL NUMBER OF OBSERVATIONS 900

C - 4 - 31

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: APR HOURS: 03-05

WIND SPEED IN KNOTS DIRECTION 1-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-49 50-64 GE 65 TOTAL MEAN MEDIAN (DEGREES) % WIND WIND (N) 350-010 2.7 2.7 .3 5.7 4.8 5.0 020-040 1.4 2.1 1.1 4.7 5.8 8.0 050-070 6.9 7.0 2,4 16.3 5.7 5.0 (E) 080-100 5.4 1.4 .9 7.8 4.2 3.0 110-130 .8 .8 1.7 2.0 140-160 .6 .2 .8 3.6 2.0 (S) 170-190 2.0 2.3 3.2 .3 3.0 200-220 1.4 2.3 1.1 4.9 7.0 8.0 230-250 4.3 5.2 1.1 .2 .1 11.0 5.8 5.0 .2 (W) 260-280 6.1 2.6 8.9 3.6 3.0 290-310 3.2 1.0 4.2 3.3 3.0 320-340 4.0 VARIABLE .3 13.7 16.0 CALM TOTALS 36.2 25.3 7.1 .4 .1 100.0 3.5 4.0

TOTAL NUMBER OF OBSERVATIONS 900

7

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: APR HCURS: 06-08

		LS	T TO UT	C: - 1					MONTH	: APR	HOUR	s: 06-08	1	
• • • • • • • • • • • • • • • • • • • •		• • • • • •	•••••	• • • • • • •		PEED IN		•••••	•••••	• • • • • • •		• • • • • •	• • • • • •	• • • • • •
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	1.2	1.3	.2	.3	******	•••••	•••••	•••••	•••••	•••••	•••••	3.1	6.4	5.5
020-040	1.6	1.7	.8									4.0	5.9	6.5
050-070	5.0	7.8	2.3	.2								15.3	6.4	6.0
(E) 080-100	8.0	3.2	1.0	.3								12.6	4.6	3.0
110-130	.4											.4	2.5	2.5
140-160	.8	.1										.9	2.9	2.5
(8) 170-190	1.3	.1	.2									1.7	4.3	3.0
200-220	2.1	2.7	1.6	.1								6.4	6.8	6.0
230-250	4.3	5.4	2.1									11.9	6.0	6.0
(W) 260-280	6.9	2.4	.2									9.6	3.5	3.0
290-310	3.4	1.1										4.6	3.3	3.0
320-340	2.1	1.4										3.6	4.0	4.0
VARIABLE	! ! !	• • • • • •	2	• • • • • • •	•••••	• • • • • • •	•••••	• • • • • • •	•••••	• • • • • • •	•••••	2	10.0	10.0
	 ,,,,,,	,,,,,,									,,,,,,,			
CALM	<i> </i> ///////				,,,,,,,	1111111	,,,,,,,	1111111	,,,,,,,		1111111			/////
TOTALS	37.1	27.2	8.6	.9								100.0	3.9	4.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

LET TO LET: - 1 MONTH: APR HOURS: 09-11

		LS	T TO UT	C: - 1					MONTE	: APR	HOUR	8: 09-11		
• • • • • • • • • • • • • • • • • • • •	• • • • • • •	• • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	•••••	• • • • • • • •	• • • • • • •	•••••	• • • • • • •
						PEED IN								
DIRECTION	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35~39	40-49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
(DEGREES)	ı											•	WIND	MTMD
(N) 350-010	1.1	1.4	1.7	.2	•••••	•••••	•••••	••••••	•••••	•••••	•••••	4.4	7.9	6.0
020-040	1.4	2.3	1.0	.1								4.9	6.9	7.5
050-070	2.8	5.0	4.9	.4								13.1	8.0	8.0
(E) 080-100	5.7	7.7	3.1	.4								16.9	6.5	6.0
110-130	2.3	1.3	.1									3.8	4.2	4.0
140-160	1.1	.1										1.2	3.1	3.0
(8) 170-190	1.3	1.1	.6									3.0	5.6	6.0
200-220	2.1	4.2	2.4	.4								9.2	7.7	8.0
230-250	4.7	6.1	4.3									15.1	6.8	7.0
(W) 260-280	3.8	4.8	1.1									9.7	5.5	5.0
290-310	2.2	3.4	.3									6.0	5.1	5.0
320-340	1.4	2.1	.7									4.2	5.4	5.5
VARIABLE		1.2	.2									1.4	7.9	8.0
CALM	1111111	//////	///////	//////	//////	///////	//////	///////	//////	///////	///////	7.0	/////	/////
TOTALS	29.9	40.7	20.4	1.5								100.0	6.1	6.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM BOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: APR HOURS: 12-14

			1 10 01	c I					PROMIT	. AEK	noon	0. 12-1	•	
***********	• • • • • • •	• • • • • • •	•••••	• • • • • • •	WIND 8	PEED IN	KNOTS	•••••	•••••	•••••	•••••	• • • • • • •	• • • • • •	• • • • • • •
Direction (Degrees)	1-4	5-9	10-14	15-19		25-29		35-39	40-49	50-64	GE 65	TOTAL	mean Wind	MEDIAN WIND
(N) 350-010	1.4	1.7	1.7	.4	• • • • • •	•••••	•••••	******	•••••	• • • • • •	•••••	5.2	7.9	8.0
020-040	.8	2.9	1.9									5.6	1 7.8	8.0
050-070	2.4	4.9	4.2	.2								11.8	7.9	8.0
(E) 080-100	3.0	5.8	3.0	.1								11.9	7.0	7.0
110-130	1.6	2.3										3.9	4.9	5.0
140-160	1.9	1.2	.1									3.2	4.5	4.0
(8) 170-190	1.0	3.6	.9	.3								5.8	7.2	6.5
200-220	2.1	3.7	3.7	.6								10.0	8.4	8.0
230-250	3.6	4.7	5.3	.4								14.0	7.5	7.0
(W) 260-280	3.0	3.6	1.8									8.3	6.0	6.0
290-310	2.1	4.0	.8									6.9	6.1	6.0
320-340	2.6	4.2	.8									7.6	5.8	5.5
VARIABLE		1.8	1.4	• • • • • •	•••••	•••••	• • • • • • •		• • • • • • •	• • • • • • •		3.2	8.7	9.0
CALM	1111111	//////	//////	//////	//////	///////	//////	///////	///////	///////	''''	2.7	/////	/////
TOTALS	25.5	44.4	25.6	2.0								100.0	6.9	7.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: APR HOURS: 15-17

• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	• • • • • •	•••••	•••••	WIND	PEED IN		•••••	• • • • • • •	•••••	•••••	• • • • • • •	•••••	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19			30-34	35-39	40-49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
(N) 350-010	2.6	2.4	2.1	.2	• • • • • •	•••••	• • • • • •	•••••	•••••	•••••	• • • • • • •	7.3	6.9	6.5
020-040	2.1	3.6	2.1									7.8	7.0	7.0
050-070	1.9	5.7	4.1	.1								11.8	7.9	8.0
(E) 080-100	3.4	5.3	2.0									10.8	6.3	6.0
110-130	1.3	1.2	.2	.1								2.9	5.4	5.0
140-160	2.1	.8	.1									3.0	4.1	3.0
(8) 170-190	2 2	3.1	1.2									6.6	6.3	6.0
200-220	2.7	3.3	2.2	.2								8.4	7.3	7.0
230-250	4.1	4.7	3.1	.1								12.0	6.7	6.0
(W) 260-280	2.3	5.2	.9									8.4	6.1	6.0
290-310	1.9	5.0	.8									7.7	6.0	6.0
320-340	2.6	4.7	1.7									8.9	6.5	7.0
VARIABLE) • • • • • • • • • • • • • • • • • • •			• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •				• • • • • • • • • • • • • • • • • • • •	•••••		
AWIWRIR		.8	1.1									1.9	9.3	10.0
CALM	///////	//////	///////	///////	//////	'//////	//////	'//////	'//////	///////	'//////	2.6	/////	/////
TOTALS	29.2	45.8	21.6	.7		•						100.0	6.5	6.0

TOTAL NUMBER OF OBSERVATIONS 900

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: APR HOURS: 18-20

									120111		20014	J. 10-20	"	
•••••	•••••	• • • • • •	•••••	•••••	WIND S	SPEED IN	KNOTS	• • • • • • •	•••••	•••••	•••••	• • • • • • • •	•••••	• • • • • • •
Direction (Degrees)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL *	MEAN WIND	MEDIAN WIND
(N) 350-010	3.7	4.3	1.0	• • • • • •	•••••	• • • • • • •	•••••	•••••	•••••	•••••	••••••	9.0	5.6	5.0
020-040	3.7	5.8	1.0	.1								10.6	5.8	5.0
050-070	4.6	6.2	1.2	.2								12.2	5.9	6.0
(E) 080-100	5.4	4.0	.6									10.0	4.6	4.0
110-130	2.4	.8	.1									3.3	3.8	3.0
140-160	1.3	.4										1.8	3.7	3.5
(8) 170-190	2.1	1.2	.7	.1								4.1	5.8	4.0
200-220	2.8	1.6	2.0	.1								6.4	6.8	6.0
230-250	4.3	3.9	.7	.1								9.0	5.3	5.0
(W) 260-280	3.7	2.4										6.1	4.1	4.0
290-310	3.6	4.7	.4									8.7	4.9	5.0
320-340	2.8	3.4	.7	.1								7.0	5.3	5.0
VARIABLE	: 	.2	1	• • • • • •	•••••	• • • • • • •	• • • • • •	• • • • • • •	•••••	• • • • • •	•••••	3	8.0	7.0
CALM	1111111	//////	,,,,,,	//////	//////	,,,,,,,	//////	,,,,,,,	//////	///////	///////	11.4	/////	/////
TOTALS	40.4	38.9	8.5	.7								100.0	4.7	5.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: APR BOURS: 21-23

		LS	T TO UI	C: - 1					MONTE	i: APR	HOUR	S: 21-23	3	
•••••		• • • • • •	•••••	•••••	WIND 8	SPEED IN	KNOTS	•••••	•••••	• • • • • • •	• • • • • • •		•••••	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL 3	MEAN WIND	MEDIAN WIND
(N) 350-010	4.8	3.8	.3	•••••	•••••	• • • • • • •	• • • • • • •	• • • • • •	•••••	• • • • • • •	• • • • • • •	8.9	4.5	4.0
020-040	3.0	5.4	.3	.1								8.9	5.6	6.0
050-070	6.4	6.0	1.6	.2								14.2	5.5	5.0
(E) 080-100	7.7	2.0	.6									10.2	3.4	3.0
110-130	1.2	.2										1.4	3.2	2.0
140-160	.6	.2										.8	3.1	2.0
(8) 170-190	1.8	.2	.2									2.2	3.8	3.0
200-220	2.1	2.2	1.3	.1								5.8	6.6	6.5
230-250	5.4	2.9	1.2									9.6	4.8	4.0
(W) 260-280	5.2	1.2										6.4	3.2	2.5
290-310	3.8	2.8	.2									6.8	3.9	4.0
320-340	2.6	1.0	.2									3.8	3.9	3.0
	 	• • • • • •	• • • • • •		• • • • • •	•••••				•••••	•••••	• • • • • • •		
VARIABLE														
CALM	1111111	//////	//////	//////	//////	'//////	//////	//////	///////	'//////	//////	21.0	/////	111111
TOTALS	44.6	27.9	5.9	.4								100.0	3.6	4.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 MONTH: APR HOURS: ALL WIND SPEED IN KNOTS DIRECTION | 1-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-49 50-64 GE 65 TOTAL MEAN MEDIAN (DEGREES) WIND WIND 2.4 2.5 1.0 (N) 350-010 .2 6.1 6.0 5.0 020-040 2.0 3.3 1.1 6.4 6.4 6.0 .1 050-070 4.7 6.1 2.8 .2 13.9 6.5 6.0 (R) 080-100 5.6 3.9 1.5 11.1 5.3 110-130 1.4 .8 .1 .0 2.2 4.2 4.0 140-160 1.1 . 4 .0 1.5 3.8 3.0 (8) 170-190 1.6 1.3 .5 3.4 5.7 5.0 .1 200-220 2.2 2.9 1.9 .2 7.2 7.2 7.0 230-250 4.4 2.4 .1 .0 11.6 6.2 6.0 (W) 260-280 4.7 3.1 8.3 4.5 4.0 2.9 290-310 2.8 .3 6.1 4.7 5.0 320-340 2.2 2.2 .5 .0 4.9 5.3 5.0 VARIABLE .4 1.0 9.2 9.0 CALM TOTALS 35.2 34.4 13.1 100.0 4.8 1.1 5.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1

MONTH: APR HOURS: ALL

CATEGORY A: CEILING GR 200 BUT LESS THAN 1500 FEET WITH VISIBILITY GE 1/2 MILE (0800 METERS).

AND/OR

VISIBILITY GE 1/2 MILE (0800 METERS) BUT LESS THAN 3 MILES (4800 METERS) WITH CEILING GE 200 FEET.

						PEED IN								
DIRECTION	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL	MEAN	MEDIAN
(DEGREES)		• • • • • • •	•••••	•••••	•••••	•••••		•••••	•••••	•••••	••••••	*	WIND	WIND
(N) 350-010	1.8	2.3	.7	.2	•••••	•••••	• • • • • • •	•••••	••••••	•••••	•••••	5.0	6.3	6.0
020-040	3.3	4.1	.7									8.2	5.5	5.0
050-070	2.8	4.1	2.8	.5								10.2	7.5	7.0
(E) 080-100	2.8	1.9	.3	.3								5.4	5.3	4.0
110-130	.6	.1										.7	2.5	2.0
140-160	.4											.4	2.2	2.0
(8) 170-190	2.1	1.0	.3									3.4	4.9	4.0
200-220	3.2	4.7	3.3	.5								11.7	7.8	8.0
230-250	5.7	0.2	3.6		.1							17.6	6.3	6.0
(W) 260-280	5.9	5.9	.7									12.5	4.7	5.0
290-310	2.8	4.0	.2									7.0	5.0	5.0
320-340	2.1	1.8										4.0	4.3	4.0
VARIABLE		• • • • • •	•••••	•••••	• • • • • •		• • • • • •	•••••	•••••	•••••	•••••	• • • • • • •	•••••	•••••
CALM	11111111	//////	///////	//////	//////	///////	//////	1111111	//////	///////	///////	13.9	/////	/////
TOTALS	33.5	38.1	12.6	1.5	.1							100.0	5.1	6.0

TOTAL NUMBER OF OBSERVATIONS 1212

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 MONTH: MAY HOURS: 00-02

		LS	T TO UT	C: - 1					MONTE	: MAY	HOUR	S: 00-02	2	
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		SPRED IN 25-29		35–39	40-49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
(N) 350-010	1.9	1.7	.1	• • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • • •	•••••	•••••	•••••	3.8	4.3	4.0
020-040	2.8	1.5	.8									5.1	5.1	4.0
050-070	9.2	6.7	.5									16.5	4.5	4.0
(E) 080-100	5.5	.6	.2									6.3	3.0	2.0
110-130	.1	.2										.3	4.7	5.0
140-160	.5											.5	1.6	2.0
(8) 170-190	.5	.4	.1									1.1	5.0	4.5
200-220	2.5	2.0	1.0									5.5	5.7	6.0
230-250	6.5	4.2	.3									11.0	4.5	4.0
(W) 260-280	4.3	.8										5.1	2.9	2.0
290-310	2.3	.4										2.7	2.7	2.0
320-340	2.0	.6										2.7	3.2	2.0
VARIABLE	! 	• • • • • •	•••••	•••••	•••••	• • • • • • •	•••••	• • • • • •	•••••	•••••	•••••	• • • • • • •	• • • • • •	•••••
CALM	////////	//////	//////	//////	//////	///////	//////	///////	//////	///////	//////	39.6	/////	/////
TOTALS	38.1	19.1	3.0									100.0	2.5	4.0
			TC	TAT. NIB	BER OF	ORSKRVA	TTONS	930						

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY

PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: MAY HOURS: 03-05

•••••	• • • • • • • •	• • • • • •	• • • • • • •	• • • • • •	WIND S	PEED IN	KNOTS	•••••	• • • • • •	•••••	• • • • • • •	• • • • • • •	•••••	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	1.1	1.1	.2	•••••	• • • • • • •	•••••	• • • • • •	•••••	• • • • • • •	•••••	•••••	2.4	5.0	5.0
020-040	2.0	2.4	.1									4.5	4.6	5.0
050-070	10.1	8.5	.6									19.2	4.6	4.0
(E) 080-100	4.6	1.0	.2									5.8	3.4	3.0
110-130	.8											.8	2.1	2.0
140-160	.3											.3	1.3	1.0
(S) 170-190	.4	.4	.1									1.0	5.2	5.0
200-220	1.5	3.2	.8									5.5	6.3	6.0
230-250	6.5	5.5	.6									12.6	4.8	4.0
(W) 260-280	4.3	1.0	.1									5.4	2.9	2.0
290-310	3.1	.4										3.5	2.6	2.0
320-340	1.1	1.1										2.2	4.1	4.5
VARIABLE	 	1	• • • • • •	• • • • • •	• • • • • • •		• • • • • •	•••••	• • • • • • •	•••••	•••••	1	7.0	7.0
	,,,,, ,,			,,,,,,										
CALM	///////	,,,,,,,	//////	//////	//////	1111111	//////	//////	//////	//////	1111111	36.8	//////	/////
TOTALS	35.8	24.7	2.7									100.0	2.8	4.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: MAY HOURS: 06-08

		1,10	10 01	C: - 1					MONTE	: MAI	HOUR	5: VO=V	•	
••••••	• • • • • • •		•••••	•••••	WIND 8	SPEED IN	KNOTS	• • • • • • •		• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	
Direction (Degrees)	1-4	5-9	10-14	15-19		25-29		35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	.8	1.4	.3	•••••	•••••	• • • • • • •	•••••	•••••	•••••	•••••	•••••	2.5	6.4	6.0
020-040	1.4	1.8	.2									3.4	5.4	5.0
050-070	7.6	8.9	2.6									19.1	5.7	5.0
(B) 080-100	9.5	4.2	.5									14.2	3.9	3.0
110-130	.3											.3	2.3	2.0
140-160	.9											.9	2.5	2.0
(8) 170-190	1.1	.4	.2									1.7	4.6	4.0
200-220	2.7	3.9	1.3									7.8	6.4	6.0
230-250	7.6	7.4	.9	.1								16.0	4.9	5.0
(W) 260-280	4.5	2.0										6.6	3.4	3.0
290-310	2.7	.9										3.5	3.4	3.0
320-340	1.3	.6	.2									2.2	4.2	3.0
VARIABLE	: 	• • • • • •	•••••	• • • • • • •	•••••	• • • • • • •		•••••	•••••	• • • • • • •	•••••	• • • • • • •	• • • • • • •	• • • • • • •
CALM	11111111	<i>'''''</i>	1117111	///////	1111111	<i></i>	//////	///////	///////	///////	'//////	21.7	/////	/////
TOTALS	40.4	31.5	6.2	.1								100.0	3.8	4.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURPACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NA

STATION NAME: SPANDAHLEM AB/GERMANY

PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 MONTH: MAY HOURS: 09-11

	• • • • • • • •	• • • • • •	• • • • • •	•••••	WIND S	PEED IN	KNOTS			• • • • • •		• • • • • • •	•••••	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		25-29		35-39	40-49	50-64	GE 65	TOTAL \$	Mean Wind	MEDIAN WIND
(N) 350-010	.6	1.5	.6	•••••	• • • • • •	• • • • • • •	•••••	• • • • • •	•••••	•••••	• • • • • • •	2.8	7.0	7.5
020-040	.4	1.6	.9									2.9	7.6	9.0
050-070	2.5	8.1	2.4	.1								13.0	7.0	7.0
(E) 080-100	5.7	8.3	3.0									17.0	6.1	6.0
110-130	3.5	1.1	.3									4.9	3.7	3.0
140-160	1.4	.2										1.6	2.7	2.0
(S) 170-190	1.9	1.8	.8									4.5	5.6	6.0
200-220	4.1	5.8	3.0	.2								13.1	6.5	6.0
230-250	6.2	7.0	3.3	.5								17.1	6.3	6.0
(W) 260-280	4.5	3.9	.3									8.7	4.5	4.0
290-310	2.2	1.5	.5									4.2	4.9	4.0
320-340	1.5	1.2	.1									2.8	4.5	4.0
VARIABLE	 	1.0			• • • • • •	• • • • • • •						1.2	8.0	8.0
CALM	///////	'/////	7//////	11/1///	//////	'//////	11////	'//////	7//////	1111111	'//////	6.1	//////	/////
TOTALS	34.5	43.0	15.4	.8								100.0	5.6	6.0

TOTAL NUMBER OF OBSERVATIONS 930

C - 4 - 44

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDARLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: MAY HOURS: 12-14

				-										
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		SPEED IN 25-29		35-39	40-49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
(Caanbau)		• • • • • •									• • • • • • •	• • • • • • • • • • • • • • • • • • • •	 MIUD	wind
(N) 350-010	.4	1.4	1.1									2.9	7.7	8.0
020-040	1.1	2.5	.6									4.2	6.6	7.0
050-070	2.7	6.0	2.0									10.8	6.8	7.0
(E) 080-100	3.0	7.1	2.7	.1								12.9	6.7	6.0
110-130	2.3	2.9	.6									5.8	5.6	5.0
140-160	1.7	1.2	.1									3.0	4.4	4.0
(S) 170-190	1.7	1.6	.8	.1								4.2	6.3	6.0
200-220	3.0	5.6	3.4	.1								12.2	7.2	8.0
230-250	6.0	8.5	4.3	.2								19.0	6.8	6.0
(W) 260-280	5.2	4.4	1.0	.1								10.6	5.2	5.0
290-310	2.7	1.9	.4									5.1	5.0	4.0
320-340	1.9	1.7	.2									3.9	4.7	4.5
	:									•••••				
VARIABLE		1.6	.8									2.4	8.5	8.0
CALM	1111111	//////	///////	///////	//////	///////	//////	///////	//////	//////	'//////	3.1	/////	//////
TOTALS	31.7	46.4	18.0	.6								100.0	6.2	6.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: JAN 80 - DEC 89 MONTH: MAY HOURS: 15-17 STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY LST TO UTC: - 1 WIND SPEED IN KNOTS 1-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-49 50-64 GE 65 TOTAL MEAN MEDIAN DIRECTION (DEGREES) * WIND WIND (N) 350-010 1.5 3.1 .9 5.5 6.6 020-040 1.2 2.7 1.1 4.9 6.7 6.0 050-070 2.2 5.6 1.6 9.4 6.5 7.0 (B) 080-100 4.1 7.2 1.6 .1 13.0 6.3 6.0 110-130 2.7 1.8 .5 5.1 4.8 4.0 140-160 1.4 .8 2.2 3.4 3.0 (S) 170-190 2.2 2.2 1.0 5.8 6.0 5.3 3.7 200-220 4.7 2.8 11.2 6.6 7.0 230-250 5.3 7.0 4.5 7.0 .4 .1 17.3 7.0 (W) 260-280 3.3 3.5 .9 7.7 5.3 5.0 290-310 3.9 2.9 1.0 7.7 5.2 4.5 320-340 2.4 4.0 VARIABLE | .1 1.0 .3 1.4 7.9 8.0 CALM TOTALS 34.4 44.9 16.4 .5 100.0 5.9 6.0 TOTAL NUMBER OF OBSERVATIONS 930

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C - 4 - 46

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

STATION NORBE	R: 100070		T TO UT		MINDARLLE	an MD/GE	rman i			H: MAY		S: 18-20)	9
•••••	• • • • • • • •	•••••	• • • • • •	• • • • • • •	WIND S	SPEED IN	KNOTS	• • • • • • •	•••••	• • • • • •	•••••	• • • • • • •	• • • • • •	• • • • • • • •
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35~39	40-49	50-64	GE 65	TOTAL %	MEAN VIND	MEDIAN WIND
(N) 350-010	3.0	2.5	1.0	.1	•••••	• • • • • • •	•••••	• • • • • • •		• • • • • • •	•••••	6.6	5.6	5.0
020-040	3.2	3.7	.4									7.3	5.1	5.0
050-070	5.4	5.5	.8									11.6	5.1	5.0
(E) 080-100	5.1	4.1	.9									10.0	4.9	4.0
110-130	1.6	.6	.2	.1								2.6	4.4	4.0
140-160	1.3	.4										1.7	3.3	3.0
(S) 170-190	2.0	1.1	.3									3.4	4.7	4.0
200-220	2.8	3.8	1.0	.2								7.7	6.1	6.0
230-250	8.1	6.8	1.8									16.7	4.9	5.0
(W) 260-280	4.1	1.8										5.9	3.7	3.0
290-310	4.0	1.8						•				5.8	3.5	3.0
320-340	3.7	2.0	.1									5.8	3.9	3.0
VARIABLE	: 	1	• • • • • •	• • • • • • •	•••••		• • • • • •		•••••	• • • • • •	•••••	1	8.0	8.0
CALM	11111111	'/////	//////	1111111	///////	(//////	//////	///////	///////	///////	////////	14.7		/////
TOTALS	44.3	34.2	6.5	.4								100.0	4.1	4.0
	-					0000000	m	020						

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: MAY HOURS: 21-23

				_						-				
	• • • • • • • •	• • • • • •	•••••	•••••		SPEED IN		• • • • • •	• • • • • •	•••••		•••••	• • • • • •	••••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	26-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	2.7	3.0	.5	.1	•••••			•••••	•••••	•••••	• • • • • • •	6.3	5.0	5.0
020-040	4.4	3.3										7.7	4.2	4.0
050-070	9.2	4.5	.3									14.1	4.0	3.0
(E) 080-100	5.8	1.2										7.0	3.0	2.0
110-130	.4											.4	1.3	1.0
140-160	.2	.1										.3	3.0	2.0
(S) 170-190	1.4	.1										1.5	2.4	2.0
200-220	1.8	3.1	.6	.1								5.7	6.0	6.0
230-250	7.6	2.8	.4									10.9	3.8	3.0
(W) 260-280	4.2	1.2	.2									5.6	3.6	3.0
290-310	3.1	.2	.1									3.4	2.5	2.0
320-340	1.8	.9										2.7	3.4	3.0
VARIABLE	: 	•••••	• • • • • •	•••••	•••••	• • • • • • •	• • • • • •	•••••	•••••	•••••	• • • • • • • • • • • • • • • • • • • •	•••••	• • • • • •	•••••
CALM	1111111	//////	//////	///////	//////	///////	//////	///////	///////	//////	///////	34.3	/////	/////
TOTALS	42.6	20.4	2.1	.2								100.0	2.6	3.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: MAY ROURS: ALL

		LS	T TO UT	C: - 1			MONTH: MAY HOURS: ALL							
DIRECTION	1-4	5-9	10-14	15-19	WIND 8 20-24	3PEED IN 25-29	30-34			50-64	GE 65	TOTAL	mban	MEDIAN
(DEGREES)		• • • • • •	•••••	******	•••••	• • • • • • •	•••••	• • • • • •	•••••	• • • • • •	•••••	*	WIND	WIND
(N) 350-010	1.5	2.0	.6	.0	•••••	• • • • • • •	•••••	•••••	•••••	•••••	•••••	4.1	5.8	6.0
020-040	2.1	2.4	.5									5.0	5.4	5.0
050-070	6.1	6.7	1.4	.0								14.2	5.4	5.0
(E) 080-100	5.4	4.2	1.1	.0								10.8	5.1	4.0
110-130	1.5	.8	.2	.0								2.5	4.5	4.0
140-160	1.0	.3	.0									1.3	3.3	3.0
(8) 170-190	1.4	1.0	.4	.0								2.8	5.3	5.0
200-220	2.8	4.0	1.7	.1								8.6	6.5	6.0
230-250	6.7	6.1	2.0	.2	.0							15.1	5.6	5.0
(W) 260-280	4.3	2.3	.3	.0								6.9	4.1	4.0
290-310	3.0	1.3	.3									4.5	4.0	4.0
320-340	2.0	1.3	.1									3.4	4.1	4.0
VARIABLE	.0	5	2	•••••	•••••	• • • • • • •		•••••			•••••	6	8.2	8.0
CALM	1111111	//////	///////	///////	//////	///////	///////	///////	///////	///////	1111111	20.0	/////	//////
TOTALS	37.8	32.9	8.8	.3								100.0	4.2	5.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 MONTH: MAY HOURS: ALL

CATEGORY A: CEILING GE 200 BUT LESS THAN 1500 FEET WITH VISIBILITY GE 1/2 MILE (0800 METERS). AND/OR

VISIBILITY GE 1/2 MILE (0800 METERS) BUT LESS THAN 3 MILES (4800 METERS) WITH CEILING GE 200 FEET.

	• • • • • • • •	• • • • • •	• • • • • • • •		• • • • • •							•••••	• • • • • • •	•••••
DIRECTION	1-4	5-9	10-14	15-19		SPEED IN 25-29		35-39	40-49	50-64	GE 65	TOTAL	MEAN	MEDIAN
(DEGREES)		• • • • • •	•••••	•••••	• • • • • •	•••••	• • • • • •	• • • • • •	• • • • • •	•••••	•••••	*	WIND	WIND
(N) 350-010	.9	1.8	.8	• • • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • •	•••••	• • • • • • •	3.5	6.9	6.0
020-040	.7	2.6	.8									4.0	7.0	7.0
050-070	2.8	5.4	.8									8.9	5.7	6.0
(E) 080-100	3.3	1.9	.2									5.5	4.4	4.0
110-130	.8	.2										1.0	3.3	3.0
140-160	.4	.1										.6	2.6	2.0
(8) 170-190	1.6	.6	.6									2.7	4.8	3.5
200-220	3.9	9.2	3.0	-1								16.2	6.8	7.0
230-250	9.0	13.8	2.7	.1								25.7	5.9	6.0
(W) 260-280	6.3	3.8	.3									10.4	4.3	4.0
290-310	3.1	1.3	.3									4.8	4.0	4.0
320-340	1.5	1.8	.1									3.3	4.9	5.0
VARIABLE		• • • • • •	•••••	•••••	•••••		•••••		•••••	•••••	• • • • • • •	•••••	• • • • • •	•••••
CALM	1111111	//////	///////	//////	/////	///////	7/////	///////	///////	//////	////////	13.5	/////	/////
TOTALS	34.3	42.5	9.6	.2								100.0	4.9	5.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: JUN HOURS: 00-02

		LS	T TO UI	C: - 1					MONTE	i: Jun	HOUR	B: 00-02	2	
•••••	• • • • • • • •	• • • • • •	•••••	• • • • • • •	WIND S	SPEED IN	KNOTE	• • • • • •	•••••	• • • • • •	•••••	• • • • • • •	• • • • • •	• • • • • • •
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		25-29		35-39	40-49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
(N) 350-010	2.9	.3	•••••	• • • • • •	•••••	• • • • • • •	•••••	• • • • • •	•••••	• • • • • •		3.2	2.6	2.0
020-040	2.9	1.8										4.7	3.8	3.0
050-070	7.0	3.2	.1									10.3	3.6	3.0
(E) 080-100	3.6	.3	.3									4.2	3.0	2.0
110-130	1.0											1.0	1.3	1.0
140-160	.2											.2	3.0	3.0
(8) 170-190	1.0	.2										1.2	2.2	1.0
200-220	1.3	1.7	.2									3.2	4.7	5.0
230-250	11.0	5.1	.6									16.7	4.0	3.0
(W) 260-280	9.3	2.4										11.8	3.0	2.5
290-310	4.6	.6										5.1	2.5	2.0
320-340	2.1	.3										2.4	3.0	2.0
VARIABLE	! !	• • • • • • •			•••••						•••••	• • • • • •		•••••
CALM	////////	,,,,,,	,,,,,,,			,,,,,,,		,,,,,,,	,,,,,,,	,,,,,,,		25.0	,,,,,,	,,,,,,
CALIF		,,,,,,	,,,,,,,	,,,,,,,	,,,,,,,		,,,,,,,,	,,,,,,,	,,,,,,,	,,,,,,,	,,,,,,,,	33.9	,,,,,,	,,,,,,
TOTALS	46.9	15.9	1.2									100.0	2.2	3.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: JUN HOURS: 03-05

	LST TO UTC: - 1									MONTH: JUN HOURS: 03-05						
WIND SPEED IN KNOTS													• • • • • • •			
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND		
(N) 350-010	2.3	.4	.1		•••••	•••••	••••••	•••••	•••••	•••••	•••••	2.9	3.3	3.0		
020-040	1.9	.8	•1									2.8	4.0	4.0		
050-070	8.1	2.2	.3									10.7	3.3	3.0		
(E) 080-100	4.7	.7										5.3	2.6	2.0		
110-130	.8											.8	1.6	1.0		
140-160	.4											.4	1.0	1.0		
(S) 170-190	.4											.4	1.5	1.5		
200-220	2.2	1.4										3.7	3.9	4.0		
230-250	11.3	6.9	.8	.2	.1							19.3	4.5	4.0		
(W) 260-280	9.2	1.6	-1									10.9	2.8	2.0		
290-310	4.4	.7										5.1	2.3	2.0		
320-340	2.2	.2										2.4	3.0	3.5		
VARIABLE	I ••••••					•••••					•••••	1				
AWINDER	}	•1										- 1	7.0	7.0		
CALM	///////	//////	///////	//////	//////	'//////	///////	'//////	//////	///////	///////	35.1	/////	/////		
TOTALS	47.9	15.0	1.4	.2	.1							100.0	2.2	3.0		

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

		LS	T TO UI	C: - 1				MONTH: JUN HOURS: 06-08							
	• • • • • • • •	• • • • • •	•••••	• • • • • •	WIND S	PEED IN	KNOTS		•••••		•••••	• • • • • • •	• • • • • •	• • • • • • •	
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		25-29		35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND	
(N) 350-010	1.1	.4	.2	• • • • • • •	•••••	******	•••••				•••••	1.8	4.6	3.5	
020-040	1.9	1.1	.3									3.3	4.9	4.0	
050-070	7.4	4.8	.4	.1								12.8	4.2	4.0	
(E) 080-100	6.9	1.2	.2									8.3	3.2	2.0	
110-130	.7											.7	1.5	1.5	
140-160	.4											.4	1.8	1.5	
(S) 170-190	1.2	.2										1.4	3.1	3.0	
200-220	2.9	3.0	.2									6.1	4.7	5.0	
230-250	11.4	8.8	1.1	.1								21.4	4.8	4.0	
(W) 260-280	10.1	3.1	.4									13.7	3.6	3.0	
290-310	3.1	1.1										4.2	3.6	3.0	
320-340	2.0	.8										2.8	3.7	3.0	
VARIABLE	 	.7	.4	•••••	•••••	•••••	•••••	•••••	•••••		•••••	1.1	8.9	9.0	
CALM	11111111	//////	///////	///////	//////	'//////	//////	///////	1111111	///////	///////	21.9	/////	/////	
TOTALS	49.1	25.2	3.2	.2								100.0	3.3	4.0	

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

STATION NUMBER	LST TO UTC: - 1									MONTH: JUN HOURS: 09~11							
***********	• • • • • • • •	•••••	• • • • • •	•••••	WIND A	SPEED IN	KNOTS		• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	•••••	• • • • • • •			
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19				35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND			
(N) 350-010	.3	1.9	.1	•••••		• • • • • •	• • • • • •	• • • • • • •		•••••	• • • • • • •	2.3	5.7	6.0			
020-040	.9	1.9	.1	.1								3.0	5.7	6.0			
050~070	2.8	6.0	1.8									10.6	6.5	6.0			
(E) 080~100	4.7	4.1	.6									9.3	4.8	4.5			
110~130	2.9	.2										3.1	3.0	3.0			
140-160	1.7											1.7	2.6	2.0			
(S) 170-190	1.2	.2										1.4	3.2	3.0			
200~220	2.8	5.1	1.9	.1								9.9	6.7	6.0			
230-250	9.1	10.8	4.2									24.1	6.0	6.0			
(W) 260-280	6.7	5.3	1.1									13.1	4.8	4.0			
290-310	3.6	3.0	.2									6.8	4.5	4.0			
320-340	2.4	1.3										3.8	4.0	4.0			
VARIABLE	 l .2	2.8	1.2			• • • • • •					• • • • • •	4.2	8.5	8.0			
	,,,,,,,,			///////		///////	///////	(//////	1111111		·//////	-		/////			
TOTALS	39.3	42.6	11.2	.2								100.0	5.2	5.0			

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 MONTH: JUN HOURS: 12-14

STATION NORBE	LST TO UTC: - 1										MONTH: JUN HOURS: 12-14						
•••••	· · · · · · · · ·	• • • • • •	•••••	• • • • • •	WIND 8	PEED IN	KNOTS	• • • • • •	•••••	•••••	•••••	• • • • • • •	• • • • • •	• • • • • • •			
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND			
(N) 350-010	1.0	1.0	.1	•••••	•••••	•••••	• • • • • •	•••••	•••••	•••••	•••••	2.1	5.2	5.0			
020-040	1.7	2.3	.9									4.9	5.8	5.0			
050-070	2.0	5.4	1.3									8.8	6.5	6.0			
(E) 080-100	3.4	2.2	.9									6.6	5.4	4.0			
110-130	2.0	.8										2.8	3.6	3.0			
140-160	1.2	.1	.1									1.4	2.9	2.0			
(S) 170-190	1.7	.8		.2								2.7	4.8	4.0			
200-220	2.7	5.2	1.4	.1		.1						9.6	6.6	6.0			
230-250	6.4	12.7	5.0	.1								24.2	6.6	7.0			
(W) 260-280	4.8	8.7	.9									14.3	5.7	6.0			
290-310	3.9	5.3	.3									9.6	5.1	5.0			
320-340	3.2	2.6										5.8	4.4	4.0			
VARIABLE	.1	3.0	1.7	• • • • • • •	• • • • • •			•••••	• • • • • •	• • • • • • •	•••••	4.8	8.7	8.0			
CALM	11111111	//////	//////	//////	//////	///////	//////	///////	///////	///////	1111111	2.6	/////	111111			
TOTALS	34.1	50.1	12.6	.4		.1						100.0	5.8	6.0			
			-		222 22			000									

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND 3PEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: JUN HOURS: 15-17

		гэ	T 10 01	C: - 1					MONTH	I: JUN	HOUR	8: 15-17	,	
•••••	• • • • • • •	• • • • • • •	• • • • • • •		WIND 8	SPEED IN	KNOTS	• • • • • • •	• • • • • •	•••••	•••••	• • • • • • •	• • • • • •	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		25-29		35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
		• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	••••••	• • • • • •	•••••	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • • •	• • • • • •	
(N) 350-010	2.3	1.1	.3									3.8	4.4	4.0
020-040	2.1	2.6	.4									5.1	5.7	5.0
050-070	2.8	6.4	1.8									11.0	6.6	6.0
(E) 080-100	2.7	2.2	.2									5.1	5.1	4.0
110-130	2.1	.2	.1									2.4	3.4	3.0
140-160	1.4											1.4	2.2	2.0
(S) 170-190	1.4	.7	.2									2.3	4.0	3.0
200-220	2.4	3.3	1.3	.1								7.2	6.3	6.0
230-250	6.4	12.3	3.1									21.9	6.4	6.0
(W) 260-280	4.9	9.2	2.2									16.3	6.0	6.0
290-310	4.8	5.4	.3									10.6	5.1	5.0
320-340	3.1	3.7	.1									6.9	4.8	5.0
• • • • • • • • • • • • • • • • • • • •	· ••••••	• • • • • • •		• • • • • • •	• • • • • •				• • • • • • •	• • • • • • •		• • • • • • •		• • • • • • •
VARIABLE	ļ	2.2	.9									3.1	8.6	8.0
CALM	1111111	//////	//////	///////	/////	///////	//////	///////	///////	//////	///////	2.8	/////	/////
TOTALS	36.4	49.3	10.9	.1								100.0	5.6	6.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

		LS	T TO UT	C: - 1					MONTH	: JUN	HOUR	S: 18-20)	
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		PRED IN 25-29		35-39	40-49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
(N) 350-010	3.6	3.4	.3	•••••	•••••	•••••	•••••	•••••	• • • • • • •	• • • • • • •	• • • • • • •	7.3	4.8	5.0
020-040	4.3	4.6	.3									9.2	5.1	5.0
050-070	5.0	5.0	.3									10.3	4.9	5.0
(E) 080-100	3.0	.8	.1									3.9	3.6	3.0
110-130	1.4											1.4	1.4	1.0
140-160	.8	.1										.9	2.4	2.0
(S) 170-190	1.4	.2										1.7	2.7	2.0
200-220	3.7	2.7	.1									6.4	4.3	4.0
230-250	8.4	11.3	1.1									20.9	5.1	5.0
(W) 260-280	6.8	5.1	.6									12.4	4.5	4.0
290-310	6.3	3.3	.1									9.8	3.7	4.0
320-340	4.0	1.9										5.9	4.0	4.0
VARIABLE		.8	•••••	• • • • • •	•••••	• • • • • • •	•••••	•••••	•••••	• • • • • • •	•••••	8	7.4	7.0
CALM	//////	//////	//////	//////	//////	///////	///////	///////	//////	///////	//////	9.0	/////	/////
TOTALS	48.7	39.2	2.9									100.0	4.1	4.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: JUN HOURS: 21-23

		LS	T TO UT	C: - 1					MONTH	I: JUN	HOUF	(S: 21-2)	3	
• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	• • • • • •		•••••	WIND 8	SPEED IN	KNOTS	•••••	• • • • • • •	•••••	• • • • • •	•••••		•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	4.6	2.0	• • • • • •	• • • • • •	• • • • • •	• • • • • • •	••••••	•••••	•••••	•••••	*****	6.6	3.5	4.0
020-040	7.2	2.6										9.8	3.6	3.5
050-070	7.8	1.8										9.6	3.2	3.0
(E) 080-100	4.0	.6	.1									4.7	3.0	3.0
110-130	.6											.6	1.4	1.0
140-160	.8											.8	1.4	1.0
(S) 170-190	.6		.1									.7	4.3	3.5
200-220	3.1	1.1	.2									4.4	3.7	3.0
230-250	9.0	4.9	.3									14.2	3.9	4.0
(W) 260-280	8.3	2.2	.1									10.7	3.2	3.0
290-310	4.7	.7										5.3	2.7	2.0
320-340	4.0	1.0										5.0	2.9	3.0
VARIABLE]	.1	• • • • • •	•••••		• • • • • • •		•••••	•••••	• • • • • •	• • • • • •	.1	7.0	7.0
CALM	1111111	//////	//////	//////	//////	///////	///////	///////	///////	///////	///////	27.7	/////	/////
TOTALS	54.7	17.0	.8									100.0	2.4	3.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 MONTH: JIN HOURS: ALL

		LS	TU OT T	C: - 1					MONTE	: JUN	HOUR	S: ALL		
	• • • • • • • •	• • • • • • •	•••••	• • • • • • •	WIND S	PEED IN	KNOTS	•••••	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • • •	• • • • • •	• • • • • • •
DIRECTION	1-4	5-9	10-14	15-19		25-29		35-39	40-49	50-64	GE 65	TOTAL	MEAN	MEDIAN
(DEGREES)		• • • • • •	• • • • • •	• • • • • • •	• • • • • •	•••••	• • • • • •	•••••	•••••	• • • • • • •	••••••	*	WIND	WIND
(N) 350-010	2.3	1.3	.2	• • • • • • •	•••••	•••••	•••••	•••••	•••••	•••••	•••••	3.7	4.2	4.0
020-040	2.9	2.2	.3	.0								5.3	4.7	4.0
050-070	5.4	4.4	.8	.0								10.5	4.8	4.0
(E) 080-100	4.1	1.5	.3									5.9	3.9	3.0
110-130	1.4	.2	.0									1.6	2.7	2.0
140-160	.9	.0	.0									.9	2.3	2.0
(S) 170-190	1.1	.3	.0	•0								1.5	3.5	3.0
200-220	2.6	2.9	.7	•0		•0						6.3	5.5	5.0
230-250	9.2	9.1	2.0	•1	•0							20.3	5.3	5.0
(W) 260-280	7.5	4.7	.7									12.9	4.3	4.0
290-310	4.4	2.5	.1					•				7.1	4.0	4.0
320-340	2.9	1.5	.0									4.4	3.9	4.0
VARIABLE	I .o	1.2	5	• • • • • •	• • • • • •	• • • • • • •		•••••	•••••	• • • • • •	•••••	1.8	8.5	8.0
CALM	1111111			//////	//////	///////	//////	1111111	1111111	1111111	//////			
TOTALS	44.7	31.8	5.6	.1								100.0	3.8	4.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY

PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1

MONTH: JUN HOURS: ALL

CATEGORY A: CEILING GE 200 BUT LESS THAN 1500 FEET WITH VISIBILITY GE 1/2 MILE (0800 METERS).

AND/OR

VISIBILITY GE 1/2 MILE (0800 METERS) BUT LESS THAN 3 MILES (4800 METERS) WITH CEILING GE 200 FEET.

•••••	• • • • • • • •	• • • • • • •	•••••		WIND S	PEED IN	KNOTS	•••••			•••••		• • • • • •	•••••
DIRECTION	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40~49	50-64	GE 65	TOTAL	MEAN	MEDIAN
(DEGREES)	}	• • • • • •	• • • • • •	•••••	• • • • • •	•••••	•••••	•••••		••••••	• • • • • • •	*	WIND	WIND
(N) 350-010	.7	1.0	• • • • • •	•••••	•••••	•••••	•••••	•••••		•••••	•••••	1.7	4.3	5.0
020-040	1.7	1.1	.1									3.0	4.2	4.0
050-070	3.0	2.6	.2									5.8	4.5	4.0
(E) 080-100	2.9	.6										3.4	2.6	2.0
110-130	9.9											.9	1.5	1.5
140-160	.7											.7	1.5	1.0
(S) 170-190	1.5	.6										2.1	3.4	3.0
200-220	3.6	6.2	.5									10.3	5.5	5.0
230-250	14.3	14.8	4.6									33.6	5.6	5.0
(W) 260-280	9.6	5.9	1.6									17.1	4.5	4.0
290-310	2.5	1.0	.2									3.8	3.6	4.0
320-340	1.7	.6										2.3	3.2	2.5
VARIABLE		• • • • • •	• • • • • •	• • • • • •	• • • • • •	•••••	•••••	•••••	• • • • • •	•••••	•••••	•••••	•••••	•••••
CALM	1111111	//////	//////	//////	//////	'//////	///////	//////	///////	///////	//////	15.4	/////	/////
TOTALS	43.1	34.4	7.2									100.0	4.1	4.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 ~ DEC 89

LST TO UTC: - 1 MONTH: JUL HOURS: 00-02

		LS	T TO UT	C: - 1					MONTH	: JUL	HOUR	s: 00-03	2	
•••••	• • • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	MAND C	DEED IN	······	• • • • • • •	•••••	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • •
DIRECTION (DEGREES)	1-4	5-9	10-14	15~19		SPEED IN 25-29		35-39	40-49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
(N) 350-010	3.1	.2	•••••	•••••	•••••	• • • • • • •	•••••	•••••	•••••	•••••	•••••	3.3	2.7	3.0
020-040	2.6	1.4										4.0	3.9	3.5
050-070	6.2	3.8	.1									10.1	4.1	4.0
(E) 080-100	4.8	.7	.1									5.6	3.1	3.0
110-130	.8	.2										1.1	2.2	1.0
140-160	.7	.1										.8	2.6	2.0
(S) 170-190	1.0	.4	.1									1.4	3.1	1.5
200-220	1.8	1.3	.5									3.6	4.9	4.5
230-250	9.6	4.8	.5									14.9	4.0	4.0
(W) 260-280	7.3	1.7										8.9	3.0	2.0
290-310	6.4	.6										7.0	2.3	2.0
320-340	3.1	.1										3.2	1.9	2.0
	 :				•••••	• • • • • • •				• • • • • • •	•••••	• • • • • •		
VARIABLE	1	.1										.1	7.0	7.0
CALM	11111111	//////	//////	//////	//////	'//////	//////	///////	///////	///////	///////	35.8	/////	/////
TOTALS	47.4	15.4	1.3									100.0	2.2	3.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: JUL HOURS: 03-05

		20	1 10 01	C 1					FONT		HOUR	3. 03-03		
•••••	• • • • • • • •	• • • • • •		• • • • • •	WIND S	SPEED IN	KNOTS	******	• • • • • • •	•••••	• • • • • • •	• • • • • • •	•••••	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	3.2	.2	• • • • • •	•••••	•••••	• • • • • • •	• • • • • •	•••••	• • • • • • •	•••••	•••••	3.5	2.6	2.0
020-040	1.8	1.0										2.7	3.9	3.0
050-070	6.0	4.9	.2									11.1	4.4	4.0
(E) 080-100	3.7	1.2										4.9	3.5	3.0
110-130	.7											.7	2.0	2.0
140-160	.2	.1										.4	3.7	3.0
(S) 170-190	.5	.4										.8	3.7	4.0
200-220	2.4	1.8	.2									4.4	4.2	4.0
230-250	9.6	6.4	.2									16.3	4.1	4.0
(W) 260-280	7.3	2.4	.1									9.8	3.5	3.0
290-310	4.0	.6										4.6	2.5	2.0
320-340	2.6											2.6	1.9	2.0
VARIABLE	! • • • • • • • • • • • • • • • • • • •			• • • • • •		• • • • • • •		•••••	• • • • • • •	•••••	• • • • • • •	1	8.0	8.0
CALM	11111111	111111	,,,,,,,	1111111	7/////	'''''	,,,,,,,	1111111	//////	//////	1111111	38.1	//////	/////
TOTALS	42.0	19.1	.7									100.0	2.3	3.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: JUL HOURS: 06-08

		LS	T TO UT	C: - 1					MONTH	i: JUL	HOUR	8: 06-08	,	
	• • • • • • •		•••••	• • • • • •	WIND S	SPEED IN	KNOTS	• • • • • • •	•••••	• • • • • •	•••••	• • • • • • •		• • • • • • •
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		25-29		35-39	40-49	50-64	GE 65	TOTAL \$	MEAN WIND	MEDIAN WIND
(N) 350-010	1.4	6	• • • • • • •	• • • • • •	• • • • • •	• • • • • • •		• • • • • • •	•••••			2.0	3.4	3.0
•														
020-040	1.9	1.6										3.5	3.9	4.0
050-070	5.2	6.1	.3									11.7	5.1	5.0
(E) 080-100	5.1	2.6	.5									8.2	4.1	4.0
110-130	.8	.1										.9	2.1	2.0
140-160	.3	.2										.6	4.2	4.0
(S) 170-190	1.2	.6										1.7	3.8	4.0
(8) 1/0-190	1.2	.6										1.7	3.0	4.0
200-220	1.5	2.8	1.5									5.8	6.7	7.0
230-250	8.2	10.6	.5									19.2	5.0	5.0
(W) 260-280	7.1	4.2	.1									11.4	4.1	4.0
290-310	4.2	1.3										5.5	2.9	2.0
320-340	2.3	.1										2.4	2.2	2.0
	! : • • • • • • •								•••••	• • • • • • •		• • • • • • •		
VARIABLE]	.2	.1									.3	9.0	9.0
CALM	1111111	//////	//////	//////	//////	///////	///////	///////	///////	'//////	'//////	26.7	/////	/////
TOTALS	39.2	31.0	3.0									100.0	3.3	4.0

USAFETAC, ASHEVILLE NC

OPERATING LOCATION "A" PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED USAFFTAC. ASSETUTIONS FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 MONTH: JUL HOURS: 09-11

LST	TO	UTC:	-	1	
			_	•	

••••••	• • • • • • •	• • • • • •	• • • • • • •	• • • • • •	WIND S	PEED IN	KNOTS	•••••	• • • • • • •	•••••	•••••	• • • • • • • •	•••••	• • • • • • •
DIRECTION (DEGREES)	1-4	5~9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL \$	MEAN WIND	MEDIAN WIND
(N) 350-010	1.6	.7	.1	•••••	• • • • • •	•••••	• • • • • •	•••••	• • • • • •	•••••	• • • • • • •	2.4	4.3	4.0
020-040	1.6	1.2	.2									3.0	4.8	4.0
050-070	2.3	5.2	.5									8.0	5.8	6.0
(E) 080-100	5.5	6.8	1.0									13.3	5.3	5.0
110-130	2.6	1.0										3.6	3.4	3.0
140-160	1.0	.1										1.2	2.6	2.0
(S) 170-190	1.7	.2	.5									2.4	3.9	2.0
200-220	2.2	3.5	3.4	.2								9.3	7.6	7.0
230-250	8.4	12.4	2.9									23.7	5.9	6.0
(W) 260-280	6.1	6.6	1.0									13.8	5.0	5.0
290-310	3.5	2.7	.1									6.3	4.5	4.0
320-340	2.8	1.3	.1									4.2	4.1	4.0
	! :	• • • • • •									• • • • • • •	• • • • • • •	• • • • • •	
VARIABLE		1.9	.5									2.3	8.5	9.0
CALM	///////	//////	///////	//////	//////	///////	//////	///////	///////	///////	'//////	6.4	//////	/////
TOTALS	39.3	43.6	10.3	.2								100.0	5.1	5.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: JUL HOURS: 12-14

		160	1 10 01	C; - 1					PONTE		поок	3. 12-19	•	
************	• • • • • • • •	• • • • • •	•••••	• • • • • • •	WIND S	SPEED IN	KNOTS	•••••	•••••		•••••	• • • • • • •		• • • • • • •
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		25-29		35-39	40~49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	2.2	1.3	.1	• • • • • •	•••••	• • • • • • •	•••••	•••••	•••••	•••••	•••••	3.6	4.3	4.0
020-040	1.3	2.0	.3									3.6	5.6	6.0
050-070	2.0	3.5	.2									5.7	5.6	6.0
(E) 080-100	2.7	4.0	1.5	.1								8.3	6.3	6.0
110-130	2.8	1.2	.1	.1								4.2	4.3	4.0
140-160	1.9	1.9										3.7	4.4	4.5
(S) 170-190	1.9	1.2	.2									3.3	4.7	4.0
200-220	2.3	4.5	2.4	.7								10.0	7.8	8.0
230-250	5.6	12.0	5.1	.3								23.1	7.1	7.0
(W) 260-280	4.0	8.6	.9									13.5	5.8	6.0
290-310	3.0	5.0	.2									8.3	5.2	5.0
320-340	2.9	3.5	.1									5.5	4.9	5.0
VARIABLE	.2	2.7	1.4	• • • • • •	•••••	• • • • • • •	•••••	• • • • • • •		•••••	• • • • • • •	4.3	8.1	8.0
CALM	1111111	//////	///////	//////	//////	///////	//////	///////	///////	///////	'//////	1.9	/////	/////
TOTALS	32.8	51.4	12.5	1.2								100.0	6.0	6.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: JUL HOURS: 15-17

• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	• • • • • •	• • • • • •	• • • • • •	WIND S	FEED IN	KNOTS	•••••	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	•••••	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40~49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	.9	2.6	.1	•••••	• • • • • • •	•••••	•••••	•••••	•••••	•••••	• • • • • • •	3.6	5.5	6.0
020-040	2.3	1.6	.3									4.3	4.8	4.0
050-070	3.3	3.3	.3									6.9	5.1	5.0
(E) 080-100	3.0	4.1	1.3									8.4	5.9	6.0
110-130	1.9	1.4	.3									3.6	4.6	4.0
140-160	2.4	.9										3.4	3.8	4.0
(S) 170-190	.9	2.2	.3									3.5	5.7	6.0
200-220	2.8	4.2	2.9	.7	.1							10.7	7.8	8.0
230-250	4.3	12.2	3.4	.3								20.3	6.9	7.0
(W) 260-280	3.4	6.9	.9									11.2	5.6	5.0
290-310	3.5	6.6	.5									10.6	5.5	6.0
320-340	2.9	4.4	.6									7.9	5.4	5.5
	 :•••••				• • • • • •		• • • • • • •							
VARIABLE	.1	1.2	.6									1.9	8.6	8.0
CALM	1111111	//////	//////	//////	//////	//////	//////	///////	//////	//////	//////	3.7	/////	/////
TOTALS	31.7	51.6	11.5	1.0	.1							100.0	5.8	6.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070

STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 S: 18-20

		LS	T 10 UT	c: - 1					MONTH	: 10T	HOUR	3: 18-20	,	
***********		• • • • • •	• • • • • • •	• • • • • •	WIND S	SPEED IN	KNOTS	• • • • • • •	•••••	•••••	•••••	• • • • • • •	• • • • • •	• • • • • • •
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		25-29		35~39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	3.3	2.5	.4	• • • • • •	•••••	•••••	•••••		•••••	• • • • • •	•••••	6.1	4.8	4.0
020-040	4.1	2.7										6.8	4.3	4.0
050-070	3.3	2.8	.6									6.7	5.0	5.0
(E) 080-100	6.3	2.5	.4									9.1	4.3	4.0
110-130	2.0	.6										2.6	3.5	3.0
140-160	.8	.5										1.3	3.7	3.0
(S) 170-190	1.1	.9										2.0	4.4	4.0
200-220	2.6	2.5	1.2	.2	.1							6.5	6.6	6.0
230-250	7.6	11.0	1.9	.1								20.6	5.7	5.5
(W) 260-280	4.8	5.0	.5	.1								10.4	5.0	5.0
290-310	5.7	4.4	.4									10.5	4.4	4.0
320-340	4.0	3.3	.2									7.5	4.5	4.0
	! : • • • • • • • • • • • • • • • • • • •	• • • • • •	•••••									• • • • • •		
VARIABLE		. 4	.1									.5	8.5	8.0
CALM	1111111	//////	//////	//////	//////	///////	//////	///////	1111111	//////	///////	9.6	/////	/////
TOTALS	45.6	39.1	5.7	.4	.1							100.0	4.5	4.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 MONTH: JUL HOURS: 21-23

SIAIION NORBE	K. 100070	LS	T TO UT		MUMILE	M AB/GE	I WELL		MONTH			S: 21-23	DEC 8	7
•••••	• • • • • • • • •	• • • • •	• • • • • •	• • • • • •	WIND S	PEED IN	KNOTS	•••••	• • • • • • •	• • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • • •
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		25-29		35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	5.1	1.2	• • • • • • •	• • • • • •	• • • • • •	•••••	• • • • • •	•••••	• • • • • • •	• • • • • •	• • • • • •	6.2	3.0	2.0
020-040	2.8	2.6	.1									5.5	4.4	4.0
050-070	9.1	2.2										11.3	3.4	3.0
(E) 080-100	4.5	.7										5.2	3.0	2.5
110-130	1.3	.1										1.4	2.7	2.0
140-160	.7											.7	1.5	1.0
(S) 170-190	1.3	.4										1.6	3.4	2.5
200-220	1.8	.7	.5	-1		•						3.1	5.3	4.0
230-250	8.8	6.2	.2									15.3	4.1	4.0
(W) 260-280	7.7	2.4	.1									10.1	3.3	2.0
290-310	6.5	1.3										7.8	2.9	2.0
320-340	3.4	.1										3.5	2.2	2.0
VARIABLE		• • • • • •	• • • • • • •	• • • • • • •				•••••	• • • • • • •	• • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • •	•••••
CALM	11111111	/////	//////	//////	//////	·//////	//////	///////	//////	//////	1111111	28.2	/////	/////
TOTALS	53.0	17.9	.9	.1								100.0	2.5	3.0
			mo.	MAT NUM	000 AD	ODCEDUA	MTONG.	040						

TING LOCATION "A"
TAC, ASHEVILLE NO

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

ON NUMBER: 106070

STATION NAME: SPANDAHLEM AB/GERMANY

PERIOD OF RECORD: JAN 80 - DEC 89
MONTH: JUL HOURS: ALL

LST	\mathbf{TO}	UTC:	-	1

		160	1 10 01	1					PONT	1. UUL	noon	3. WILL		
•••••	•••••		•••••	•••••	WIND S	SPEED IN	KNOTS		******	• • • • • • •			• • • • • •	• • • • • • •
RECTION	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL	MEAN	MEDIAN
EGREES)		• • • • • •	•••••	•••••	•••••	• • • • • • •	•••••		•••••	•••••	• • • • • • •	8	WIND	WIND
50-010	2.6	1.2	.1	•••••	••••		•••••	• • • • • • •	••••••	• • • • • • •	• • • • • • •	3.8	3.8	3.0
20-040	2.3	1.8	.1									4.2	4.4	4.0
50-070	4.7	4.0	.3									8.9	4.7	4.0
80-100	4.4	2.8	.6	.0								7.9	4.7	4.0
10-130	1.6	.6	.1	.0								2.3	3.6	3.0
40-160	1.0	.5										1.5	3.7	3.0
70-190	1.2	.8	.1									2.1	4.4	4.0
:00-220	2.2	2.7	1.6	.2	.0							6.7	6.9	7.0
:30-250	7.8	9.5	1.8	.1								19.2	5.5	5.0
:60-280	5.9	4.7	.5	.0								11.1	4.5	4.0
:90-310	4.6	2.8	.1									7.6	4.0	4.0
20-340	3.0	1.6	.1									4.8	4.0	3.0
RIABLE	.0	8	3	• • • • • • • • • • • • • • • • • • • •	•••••	• • • • • • •		• • • • • •	******	• • • • • •	•••••	1.2	8.3	8.0
:ALM	1111111	//////	///////	///////	//////	///////	//////	///////	///////	//////	///////	18.7	/////	/////
/TALS	41.3	33.8	5.7	.3								100.0	4.0	4.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: JUL HOURS: ALL

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CATEGORY A: CEILING GE 200 BUT LESS THAN 1500 FEET WITH VISIBILITY GE 1/2 MILE (0800 METERS).

AND/OR

VISIBILITY GE 1/2 MILE (0800 METERS) BUT LESS THAN 3 MILES (4800 METERS) WITH CEILING GE 200 FEET.

						BPEED IN								
DIRECTION	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL	MEAN	MEDIAN
(Degrees)		•••••	•••••	•••••		•••••	•••••	•••••	•••••			*	WIND	WIND
(N) 350-010	1.9	.3	•••••	•••••		• • • • • • •		•••••	•••••		•••••	2.2	3.4	3.0
020-040	1.2	.3										1.6	3.0	3.0
050-070	.6	1.4	.2									2.2	5.7	6.0
(E) 080-100	1.4	.6										2.0	3.7	3.0
110-130	.9	.3				•						1.2	-	4.0
140-160	.5	.5										.9	3.8	4.5
(S) 170-190	1.2	.6										1.9	3.8	3.5
200-220	2.8	5.1	2.6	.5								11.1	7.0	7.0
230-250	11.1	27.6	6.1	.2								44.9	6.4	6.0
(W) 260-280	4.8	7.5	.6									12.9	5.4	6.0
290-310	2.6	.9										3.6	3.3	2.0
320-340	2.5	.3										2.8	2.4	2.0
VARIABLE		• • • • • •	•••••	•••••				• • • • • • •		• • • • • •	• • • • • • • •	•••••		•••••
CALM	11111111	//////	//////	///////	//////	///////	(//////	((((()	///////	//////	///////	12.8	/////	//////
TOTALS	31.5	45.4	9.5	.7								100.0	5.0	6.0

OPERATING LOCATION "A" PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED USAFETAC, ASHEVILLE NC FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: AUG HOURS: 00-02

					WIND S	SPEED IN	KNOTS							
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35~39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	1.2	.4	•••••	•••••	•••••	• • • • • • •		••••••	•••••	•••••	•••••	1.6	3.2	3.0
020-040	1.3	.6										1.9	3.7	3.0
050-070	6.0	1.6										7.5	3.1	3.0
(E) 080-100	6.2	.4										6.6	2.3	2.0
110-130	.7											.7	1.5	1.0
140-160	.5											.5	2.3	2.0
(8) 170-190	.4											.4	2.0	1.0
200-220	1.6	1.3										2.9	4.9	4.0
230-250	8.8	5.4	.7	.5								15.4	4.9	4.0
(W) 260-280	7.6	.8										8.5	2.5	2.0
290-310	6.0	.7	.2									6.9	2.7	2.0
320-340	2.3											2.3	2.2	2.0
VARIABLE	! ! !	•••••	•••••	• • • • • • •	• • • • • • •	• • • • • • •		•••••	•••••	•••••	•••••	• • • • • • •	•••••	•••••
CALM	11111111	//////	//////	///////	//////	///////	//////	///////	//////	//////	//////	44.9	/////	/////
TOTALS	42.6	11.2	.9	•5								100.0	1.9	3.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: AUG HOURS: 03-05

	1000.0	LS	T TO UI	c: - 1	10.0.0.				MONTE	: AUG	HOUR	8: 03-05	5	•
**********			•••••	•••••	WIND 8	PEED IN	KNOTS	• • • • • • •	• • • • • •	•••••	• • • • • •	•••••	•••••	• • • • • • •
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	1.0	.2	•••••		•••••	•••••	• • • • • • •	• • • • • • •	•••••	• • • • • •	• • • • • • •	1.2	2.9	2.0
020-040	.6	.4										1.0	3.4	2.0
050-070	6.9	1.0										7.9	2.7	2.0
(E) 080-100	5.7	.7										6.5	2.5	2.0
110-130	.7	.1										.8	1.9	1.0
140-160														
(S) 170-190	.1	.2										.4	5.3	6.0
200-220	.5	1.3	.1	.1								2.0	5.7	5.0
230-250	7.4	6.9	.6	.2								15.2	5.0	5.0
(W) 260-280	11.8	1.0	.1									12.9	2.5	2.0
290-310	5.6	1.1										6.7	2.6	2.0
320-340	1.6											1.6	1.8	2.0
VARIABLE	: 	•••••	• • • • • •	•••••	•••••							•••••	• • • • • •	•••••
CALM	11111111	'/////	///////	///////		///////	///////	17/////	'//////	///////	·//////	44.0	//////	/////
TOTALS	41.9	12.9	.8	.3								100.0	1.9	3.0
	-													

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070

STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

MONTH: AUG HOURS: 06-08 LST TO UTC: - 1

•••••••	• • • • • • • •	• • • • • •	• • • • • •	• • • • • •	WIND S	PEED IN	KNOTS	• • • • • • •	•••••	•••••	•••••	• • • • • • •	• • • • • •	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	1.2	.5	•••••	• • • • • •	•••••	•••••	•••••	•••••	•••••	•••••	•••••	1.7	3.4	3.0
020-040	1.6	.2										1.8	2.9	3.0
050-070	6.0	2.9										8.8	3.6	3.0
(E) 080-100	7.4	1.2										8.6	2.9	3.0
110-130	1.0											1.0	1.6	1.0
140-160	.6											.6	1.8	1.0
(S) 170-190	.4	.5										.8	4.3	5.0
200-220	1.7	1.8	.5									3.9	5.5	6.0
230-250	8.0	7.8	1.7	.4								17.8	5.5	5.0
(W) 260-280	11.5	3.3	.4									15.2	3.4	3.0
290-310	4.7	1.2										5.9	2.9	2.0
320-340	2.0	.4										2.4	2.7	2.0
VARIABLE	! : · · · · · · ·									• • • • • • •	• • • • • • •	•••••		
VARIABLE	ĺ	.1										.1	7.0	7.0
CALM	//////	//////	//////	///////	//////	'//////	//////	'//////	//////	///////	'//////	31.4	/////	/////
TOTALS	46.1	19.9	2.6	.4								100.0	2.7	3.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM BOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: AUG HOURS: 09-11

		-	1 10 01	••										
***********	• • • • • • • •	• • • • • • •	•••••	•••••	WIND 8	SPEED IN	KNOTS	*****	•••••	•••••	• • • • • • •		•••••	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
(N) 350-010	.5	1.1	•••••	•••••	•••••	• • • • • • •	•••••	•••••	•••••	•••••	• • • • • • •	1.6	5.1	5.0
020-040	1.0	1.4	.1									2.5	5.3	5.0
050-070	2.0	3.5	•1									5.6	5.3	5.0
(E) 080-100	9.3	5.3										14.6	3.9	3.5
110-130	4.4	.6	.1									5.1	2.7	2.0
140-160	1.7	.5										2.2	2.6	2.0
(S) 170-190	1.1	.4	-1									1.6	3.3	2.0
200-220	3.8	2.7	1.3	.1								8.0	5.6	6.0
230-250	9.1	12.9	4.9	.4								27.2	6.3	6.0
(W) 260-280	7.2	6.5	.8									14.5	4.8	5.0
290-310	2.7	3.1	.2									6.1	4.7	5.0
320-340	2.0	1.3	.1									3.5	4.5	4.0
VARIABLE	: 		• • • • • • •	•••••	• • • • • •		• • • • • •	•••••	•••••	•••••	• • • • • • •		8.2	8.0
CALM	1111111	//////	///////	//////	//////	///////	1111111	///////	///////	///////	'//////	6.9	/////	/////
TOTALS	44.8	40.0	7.7	.5								100.0	4.7	5.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: ~ 1 MONTH: AUG HOURS: 12-14

		-	1 10 01						· WHI	. nog	110014	D. 12-19		
••••••	•••••	• • • • • •	•••••	• • • • • • •	WIND S	SPEED IN	KNOTS				•••••	• • • • • • •	• • • • • •	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25~29	30-34	35-39	40-49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
(N) 350-010	.5	1.4	.1	• • • • • •	•••••	• • • • • • •	• • • • • •	• • • • • • •	•••••	•••••	•••••	2.0	5.8	6.0
020-040	1.8	1.0	.1									2.9	4.6	4.0
050-070	1.6	2.5	.6									4.7	5.8	6.0
(E) 080-100	1.7	2.7	.2									4.7	5.1	5.0
110-130	2.9	2.0	.1									5.0	4.6	4.0
140-160	2.9	.2										3.1	2.6	2.0
(8) 170-190	1.9	1.2	.5									3.6	5.3	4.0
200-220	4.4	3.2	3.5	.5								11.6	6.9	6.0
230-250	5.4	15.7	8.0	.6								29.6	7.5	7.0
(W) 260-280	5.5	6.5	1.9									13.9	5.6	5.0
290-310	3.7	4.7	1.0									9.3	5.3	5.0
320-340	1.8	3.0										4.8	5.2	5.0
VARIABLE		1.8	8	• • • • • •	•••••	• • • • • • • •	•••••	· • • • • • • • • • • • • • • • • • • •	•••••	• • • • • •	•••••	2.6	8.7	8.0
CALM	1111111	//////	///////	//////	//////	///////	//////	///////	//////	//////	11/1/1/	2.3	/////	/////
TOTALS	34.1	45.9	16.8	1.1								100.0	6.0	6.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

				C: - 1					HONTH	: AUG	HOOK	S: 15-17		
•••••	• • • • • • • •	• • • • • •	• • • • • • •	•••••	WIND 9	PEED IN	KNOTS	•••••	• • • • • • •	• • • • • • •	•••••	• • • • • • •	•••••	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		25-29		35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	2.2	1.4	.4	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	3.9	4.7	4.0
020-040	1.6	1.1	.7									3.3	5.4	5.0
050-070	1.9	2.3	.5									4.7	5.6	5.0
(E) 080-100	2.9	1.9	.1									4.9	4.4	4.0
110-130	2.6	.8	.2									3.7	3.9	3.0
140-160	1.9	1.0										2.9	3.5	3.0
(S) 170-190	2.5	1.2	.2									3.9	4.1	3.0
200-220	3.9	5.0	3.0	.1								12.1	6.5	6.0
230-250	6.1	15.1	4.7	.6	.1							26.5	7.0	7.0
(W) 260-280	5.7	6.3	1.3									13.4	5.5	5.0
290-310	2.9	5.9	.6									9.3	5.7	6.0
320-340	1.9	4.5	.8									7.3	5.9	6.0
VARIABLE	<u>:</u> !	1.2		•••••	• • • • • •	•••••	•••••	• • • • • • •	• • • • • •		• • • • • • •	2.0	8.8	9.0
CALM	1111111	//////	//////	//////	///////	///////	///////	///////	//////	///////	1111111			
	ļ													
TOTALS	36.1	47.7	13.3	.7	.1							100.0	5.8	6.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: AUG HOURS: 18-20

WIND SPEED IN KNOTS DIRECTION 1-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-49 50-64 GE 65 TOTAL MEAN WIND (N) 350-010 3.1 1.0 .2 4.3 3.6 020-040 2.3 1.6 .5 4.3 5.1 050-070 4.3 2.2 6.5 3.6	MEDIAN WIND 3.0 4.0 3.0
(DEGREES)	3.0 4.0 3.0
020-040 2.3 1.6 .5 4.3 5.1	4.0 3.0
	3.0
050-070 4.3 2.2 6.5 3.6	
	4.0
(E) 080-100 3.9 1.2 5.1 3.7	
110-130 2.0 .2 2.3 2.7	3.0
140-160 1.2 .2 1.4 2.8	2.0
(8) 170-190 1.1 .1 1.2 2.2	2.0
200-220 3.1 2.9 .7 6.7 4.9	5.0
230-250 8.6 9.2 2.3 20.1 5.4	5.0
(W) 260-280 7.0 4.4 .1 11.6 3.9	4.0
290-310 7.4 3.8 .6 11.8 4.0	3.0
320–340 6.0 3.2 .4 9.6 3.9	4.0
VARIABLE .6 .6 7.8	8.0
CALM ////////////////////////////////////	/////
TOTALS 50.0 30.6 4.8 100.0 3.7	4.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: AUG HOURS: 21-23

		ш	1 10 01	1					HONTE		HOOK	J. 21-2.	,	
	• • • • • • • •	• • • • • •		•••••	WIND 8	SPEED IN	KNOTS	•••••	•••••	•••••	• • • • • • •	•••••	• • • • • •	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL	MEAN WIND	WEDIAN
(N) 350-010	2.6	.7	• • • • • •	•••••	•••••	• • • • • • •	•••••	• • • • • •	•••••	•••••	• • • • • • •	3.3	3.0	2.0
020-040	3.7	1.7	.5									5.9	4.4	4.0
050-070	6.9	1.4										8.4	3.3	3.0
(E) 080-100	4.5	.2										4.8	2.4	2.0
110-130	.8	.1										1.0	2.1	2.0
140-160	.4											.4	3.0	3.0
(S) 170-190	.8											.8	1.7	1.0
200-220	1.4	2.3	.7	.1								4.5	6.5	6.0
230-250	9.0	4.5	.6									14.1	4.0	4.0
(W) 260-280	9.4	.8										10.3	2.6	2.0
290-310	6.3	1.1										7.4	2.7	2.0
320-340	3.5	.2										3.7	2.0	2.0
VARIABLE		1	• • • • • • •	•••••	• • • • • •			• • • • • • •			•••••	1	7.0	7.0
CALM	11111111	1/////	//////	1//////	1/////	11/1///	7//////	'//////	11/////	7/////	'//////	35.4	//////	/////
TOTALS	49.3	13.1	1.8	.1								100.0	2.2	3.0
			-					0.37						

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: AUG HOURS: ALL

			1 10 01						PONTE	. AUG	NOON	S. ALL		
•••••					WIND S	PEED IN	KNOTS							•••••
DIRECTION	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL	MEAN	MEDIAN
(Degrees)		• • • • • • •	•••••	•••••	•••••	•••••	******	•••••	•••••	•••••	•••••	8	WIND	WIND
(N) 350-010	1.5	.8	.1	•••••	•••••	•••••	•••••	•••••	•••••	•••••		2.4	4.0	3.0
020-040	1.7	1.0	.2									2.9	4.6	4.0
050-070	4.5	2.2	.1									6.8	3.9	3.0
(E) 080-100	5.2	1.7	.0									7.0	3.4	3.0
110-130	1.9	.5	.1									2.4	3.3	3.0
140-160	1.1	.2										1.4	2.8	2.0
(8) 170-190	1.0	.4	.1									1.6	4.0	3.0
200-220	2.6	2.6	1.2	.1								6.5	6.1	6.0
230-250	7.8	9.7	2.9	.3	.0							20.7	6.0	6.0
(W) 260-280	8.2	3.7	.6									12.5	4.0	3.0
290-310	4.9	2.7	.3									7.9	4.0	3.0
320-340	2.6	1.6	.2									4.4	4.1	4.0
VARIABLE	! !	 .6		•••••					• • • • • • •		•••••		8.5	8.0
***************************************		.5	• •										0.5	0.0
CALM	1111111	//////	///////	'//////	1/////	'//////	//////	'//////	'//////	'//////	1111111	22.7	/////	/////
TOTALS	43.0	27.7	6.0	.4								100.0	3.6	4.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 MONTH: AUG HOURS: ALL

CATEGORY A: CEILING GE 200 BUT LESS THAN 1500 FEET WITH VISIBILITY GE 1/2 MILE (0800 METERS).

AND/OR

VISIBILITY GE 1/2 MILE (0800 METERS) BUT LESS THAN 3 MILES (4800 METERS) WITH CEILING GE 200 FEET.

						WIND S	SPEED IN	KNOTS							
	DIRECTION	1-4	5-9	10-14	15-19	20-24	25-29	30~34	35-39	40-49	50-64	GE 65	TOTAL	MEAN	MEDIAN
•••	(DEGREES)		• • • • • •	•••••	•••••		• • • • • • •		•••••	• • • • • •	•••••	•••••	*	WIND	WIND
(N)	350-010	2.3	.6	• • • • • • •	•••••	******	• • • • • • •	•••••		•••••	•••••	•••••	2.8	2.9	2.0
	020-040	1.6	.4										2.0	3.0	2.0
	050-070	2.4	1.4										3.8	3.5	3.0
(E)	080-100	4.2	.1										4.4	2.1	2.0
	110-130	1.4	.1	.1									1.7	3.0	2.0
	140-160	.6											.6	1.0	1.0
(S)	170-190	1.4	.1										1.6	2.0	1.0
	200-220	2.5	2.7	1.3									6.5	5.8	5.0
	230-250	10.6	14.9	4.8	.7								31.0	6.3	6.0
(W)	260-280	10.2	4.0	.6									14.7	3.7	3.0
	290-310	3.8	1.4	.3									5.5	4.1	3.0
	320-340	2.1	.4										2.5	2.8	2.0
•••	VARIABLE]	• • • • • •			• • • • • •	· • • • • • • • • • • • • • • • • • • •	•••••	•••••	• • • • • •		• • • • • • •	• • • • • • •	•••••	•••••
	CALM	1111111	//////	///////	///////	//////	///////	///////	//////	///////	///////	///////	22.9	/////	/////
	TOTALS	43.1	26.1	7.1	.7								100.0	3.6	4.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: SEP HOURS: 00-02

		LS	T TO UT	C: - 1					MONTH	: SEP	HOUR	s: 00-02	2	
•••••	• • • • • • • •		• • • • • • •	• • • • • •	WIND	SPEED IN		• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •
DIRECTION (DEGREF	1-4	5-9	10-14	15-19			30-34	35-39	40-49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
(N) 350-010	1.7	.5	••••••	• • • • • • •	•••••	• • • • • • •	•••••	•••••		•••••		2.2	3.6	3.0
020-040	2.5	.2										2.7	2.6	2.0
050-070	8.1	3.2	.1									11.5	3.3	3.0
(E) 080-100	4.8											4.8	2.2	2.0
110-130	1.1											1.1	1.8	2.0
140-160	.4											.4	3.0	3.0
(S) 170-190	.5	.7	.1									1.4	5.5	6.0
200-220	1.4	1.9	1.1									4.3	6.4	6.0
230-250	6.5	7.2	2.5	.1								16.3	5.8	5.0
(W) 260-280	6.3	1.5	.4									8.1	3.5	3.0
290-310	3.8	.1										4.0	1.9	2.0
320-340	1.7	.2										2.0	2.8	2.0
VARIABLE				• • • • • •	•••••	• • • • • • •	•••••	· • • • • • •	•••••	•••••	•••••	•••••	• • • • • •	• • • • • • • • • • • • • • • • • • • •
CALM	1111111	//////	//////	//////	//////	///////	///////	'//////	///////	///////	///////	41.2	/////	//////
TOTALS	38.8	15.5	4.2	.1								100.0	2.4	3.0

TOTAL NUMBER OF OBSERVATIONS 810

C - 4 - 81

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

		LS	T TO UI	:C: - 1					MONTH	: SEP	HOUR	s: 03-0	5	
• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	• • • • • •	• • • • • • •	•••••	WITHOUT	DEED TH	· · · · · · ·	•••••	• • • • • • •	•••••	• • • • • • •	• • • • • •	• • • • • •	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		SPEED IN 25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	2.0	.5	•••••	•••••	•••••	• • • • • • •	•••••	•••••	•••••	•••••	•••••	2.5	3.3	2.0
020-040	2.0	.7										2.7	3.4	3.0
050-070	7.5	3.1	.2									10.8	3.6	3.0
(E) 080-100	7.0	.5										7.5	2.6	2.0
110-130	.1					•						.1	3.0	3.0
140-160		.1										.1	5.0	5.0
(S) 170-190	1.0	.1										1.1	2.2	2.0
200-220	1.7	1.7	1.6	.1								5.2	7.1	7.0
230-250	6.6	9.6	2.7									18.9	6.1	6.0
(W) 260-280	3.8	1.8	.1									5.8	3.8	3.0
290-310	2.7	.1	.4									3.2	3.2	2.0
320-340	1.5	.5										2.0	2.9	2.5
VARIABLE	1 		• • • • • • • • • • • • • • • • • • • •					•••••			• • • • • • • • • • • • • • • • • • • •		13.7	15.0
VACCADAD]	••		••								• •	13.7	15.0
CALM	///////	//////	///////	//////	//////	'//////	'//////	'//////	'//////	///////	//////	39.9	//////	/////
TOTALS	35.9	18.8	5.0	.3								100.0	2.7	4.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED

FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070

STATION NAME: SPANDAHLEM AB/GERMANY

PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 MONTH: SEP HOURS: 06-08

,		• • • • • •	•••••	• • • • • • •		PEED IN		•••••	•••••		•••••	•••••	• • • • • •	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	1.0	.9	******	• • • • • • •	•••••		•••••	• • • • • •	•••••	•••••	••••••	1.8	4.3	4.0
020-040	1.2	1.0										2.2	4.4	4.0
050-070	6.8	4.0	.4									11.2	4.1	4.0
(E) 080-100	6.8	1.8										8.6	3.0	2.0
110-130	.6											.6	1.6	1.0
140-160	.2											.2	1.0	1.0
(S) 170-190	.2	.1										.4	3.7	4.0
200-220	1.7	3.9	1.3	.2	.1							7.3	7.4	7.0
230-250	5.6	9.8	3.2	•1								18.7	6.4	6.0
(W) 260-280	5.7	2.1	.6									8.4	4.1	4.0
290-310	3.4	.2										3.6	2.3	2.0
320-340	2.1	.2										2.3	2.5	2.0
VARIABLE) • • • • • • • • • • • • • • • • • • •	· • • • • •	•••••		• • • • • • •		• • • • • • •		•••••			1	15.0	15.0
*AKIABUS													13.0	15.0
CALM	///////	'/////	//////	//////	//////	'//////	//////	'//////	'//////	//////	'///////	34.5	//////	/////
TOTALS	35.3	24.0	5.5	.4	.1							100.0	3.2	4.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: SEP HOURS: 09-11 WIND SPEED IN KNOTS DIRECTION 1-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-49 50-64 GE 65 TOTAL MEAN MEDIAN (DEGREES) % WIND WIND . (N) 350-010 .8 1.3 2.2 5.7 6.0 020-040 1.0 1.3 2.4 5.9 6.0 .1 050-070 3.4 9.6 5.5 .6 6.0 (E) 080-100 10.5 5.7 17.1 4.2 4.0 110-130 2.2 .5 2.7 3.0 3.0 140-160 1.0 .2 .1 4.1 3.0 1.3 (S) 170-190 1.8 1.0 3.9 .1 2.9 4.0 200-220 3.2 4.0 2.7 7.2 .5 10.3 7.0 230-250 5.8 11.6 7.2 .7 25.3 7.3 7.0 (W) 260-280 6.2 3.4 .7 10.3 4.6 3.0 290-310 2.3 .6 3.0 2.9 2.0 320-340 1.5 3.6 1.9 4.0 VARIABLE 9.4 8.0 CALM TOTALS 39.7 36.3 12.4 1.2 100.0 5.1 5.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: SEP HOURS: 12-14

		ш	1 10 01	c 1					MONTE	i: OBP	noor	D: 12-14	•	
	• • • • • • • •	• • • • • •	•••••	• • • • • • •	WIND S	PEED IN	KNOTS	•••••	•••••	• • • • • •	•••••	• • • • • • •	• • • • • •	• • • • • • •
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		25-29		35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	.8	2.5	.1	• • • • • •	•••••	•••••	•••••	•••••	•••••	•••••	•••••	3.5	5.8	6.0
020~040	.2	2.5										2.8	6.6	7.0
050-070	2.4	3.4	.8									6.7	5.6	5.0
(E) 080-100	4.2	5.1	.8									10.2	5.3	5.0
110-130	2.5	1.8	.1									4.5	4.5	4.0
140-160	2.3	.7	.1									3.2	3.9	3.0
(S) 170-190	3.5	2.3	.2									6.1	4.4	4.0
200-220	2.8	4.4	3.4	.6								11.2	7.7	8.0
230-250	8.0	12.2	9.6	1.1	.1							31.0	7.6	8.0
(W) 260-280	4.0	4.5	1.7									10.2	5.7	5.0
290-310	2.4	1.6	.1									4.1	4.2	4.0
320-340	1.1	.6										1.7	4.1	4.0
	! • • • • • • • • •											• • • • • • •	•••••	
VARIABLE		1.2	1.0	.1								2.3	9.5	9.0
CALM	///////	//////	//////	//////	//////	'//////	//////	'//////	///////	'//////	'//////	2.7	/////	/////
TOTALS	34.2	42.8	17.9	1.8	.1							100.0	6.1	6.0
						_		_						

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: SEP HOURS: 15-17

WIND SPEED IN KNOTS DIRECTION (DEGREES) 1-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-49 50-64 GE 65 TOTAL MEAN R WIND (N) 350-010 7 2.6 .4 3.7 6.3 020-040 1.3 2.1 3.4 5.0 050-070 2.7 4.4 .4 .4 7.4 5.3 (E) 080-100 5.1 2.9 .9	
(N) 350-010	••••
020-040 1.3 2.1 3.4 5.0 050-070 2.7 4.4 .4 7.4 5.3	EDIAN WIND
050-070 2.7 4.4 .4 7.4 5.3	6.0
	5.0
(E) 080-100 5.1 2.9 .9 8.9 4.4	5.0
	3.0
110-130 4.5 1.1 .1 5.7 3.2	3.0
140-160 3.3 1.0 4.3 3.3	3.0
(S) 170-190 2.3 2.2 .4 .2 5.1 5.3	5.0
200-220 2.8 4.6 2.6 .6 .1 10.7 7.5	6.0
230-250 7.1 12.8 8.4 .5 28.7 7.1	7.0
(W) 260-280 5.1 4.5 1.0 10.6 5.1	5.0
290-310 2.6 1.9 .2 4.8 4.9	4.0
320-340 .7 .7 1.5 4.9	4.5
VARIABLE .9 .1 .1 1.1 9.0	8.0
CALM ///////// 4.1 //////	1111
TOTALS 38.2 41.7 14.4 1.5 .1 100.0 5.6	5.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: SEP HOURS: 18-20

		LS	T TO UI	C: - 1					MONTH	: SEP	HOUR	s: 18-20)	
• • • • • • • • • • • • • • • • • • • •	• • • • • • •	• • • • • •	•••••	• • • • • • •	WIND	PEED IN	WMOVED !	•••••	•••••	• • • • • • •	•••••	• • • • • •	• • • • • •	• • • • • • •
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19			30-34	35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
• • • • • • • • • • • • • • • • • • • •		• • • • • •	• • • • • •	• • • • • •	• • • • • •		• • • • • •	• • • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • • •	• • • • •	• • • • • • •
(N) 350-010	2.6	1.5										4.1	3.9	3.0
020-040	4.6	2.5										7.0	4.0	4.0
050-070	5.9	2.6										8.5	3.6	4.0
(E) 080-100	6.5	1.7										8.3	3.2	3.0
110-130	1.9											1.9	1.9	2.0
140-160	.5											.5	2.5	2.5
(S) 170-190	1.1	.6	.4									2.1	5.2	4.0
200-220	3.5	2.7	2.1									8.3	6.1	6.0
230-250	8.3	10.6	3.2	.1								22.2	5.9	6.0
(W) 260-280	4.1	2.6	.6	.1								7.4	4.4	4.0
290-310	4.2	.9										5.1	2.8	2.0
320-340	3.0	.2										3.2	2.3	2.0
VARIABLE		.1	•••••	•••••	•••••	•••••	•••••	• • • • • • •	•••••	• • • • • •	•••••	.1	6.0	6.0
CALM	1111111	//////	//////	///////	//////	'//////	//////	'//////	//////	///////	//////	21.4	/////	/////
TOTALS	46.2	26.0	6.3	.2								100.0	3.5	4.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: SEP HOURS: 21-23

		LS	T TO UI	C: - 1					MONTE	i: SEP	HOUR	S: 21-23	3	
•••••	•••••	• • • • • •	• • • • • • •	• • • • • • •	WIND	SPEED IN	www.	•••••	•••••	•••••	• • • • • • • •	• • • • • • •	• • • • • •	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		25-29		35-39	40-49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
		• • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • •	• • • • • •	•••••	• • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •
(N) 350-010	2.7	.9										3.6	3.1	3.0
020-040	3.1	1.2										4.3	3.4	3.0
050-070	9.0	2.7	.1									11.9	3.4	3.0
(E) 080-100	6.7	1.0	.1									7.8	2.9	2.0
	i	_												
110-130	1.2	.2										1.5	2.1	2.0
140-160	.4											.4	2.0	2.0
140-100												.*	2.0	2.0
(S) 170-190	.6	.5										1.1	4.3	4.0
200-220	1.0	2.0	1.7	.1								4.8	8.3	8.0
230-250	7.0	7.9	3.1									18.0	5.9	5.0
(W) 260-280	6.5	1.6	.2									8.4	3.2	2.5
(#) 200-200	0.5	1.0	• • •									0.4	3.2	2.5
290-310	2.1	.2	.1									2.5	2.4	2.0
320-340	1.4											1.4	1.4	1.0
	ł					•								
VARIABLE]	• • • • • •	•••••	•••••	•••••			• • • • • • •	• • • • • • •	• • • • • •	•••••	•••••	•••••	•••••
CALM	1111111	//////	///////	///////	//////	///////	//////	'''''	///////	///////	//////	34.4	/////	111111
TOTALS	41.7	18.2	5.3	.1								100.0	2.8	3.0

TOTAL NUMBER OF OBSERVATIONS 810

C - 4 - 88

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

		LS	TU OT T	c: - 1					MONTE	I: SEP	HOUR	S: ALL		
•••••	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	WIND	SPEED IN		• • • • • • •	• • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • • •
DIRECTION	1-4	5-9	10-14	15-19				. 35-39	40-49	50-64	GE 65	TOTAL	MEAN	MEDIAN
(DEGREES)		• • • • • •	•••••	••••••	• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	*	WIND	WIND
(N) 350-010	1.5	1.3	.1	•••••	• • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • •	• • • • • • •	2.9	4.6	4.0
020-040	2.0	1.5	.0									3.4	4.3	4.0
050-070	5.7	3.6	.3									9.7	4.2	4.0
(E) 080-100	6.5	2.4	.3									9.2	3.7	3.0
110-130	1.8	.5	.0	.0								2.3	3.1	3.0
140-160	1.0	.3	.0									1.3	3.4	3.0
(S) 170-190	1.4	.9	.2	.0								2.5	4.6	4.0
200-220	2.2	3.2	2.1	.3	.0							7.8	7.2	7.0
230-250	6.9	10.2	5.0	.3	.0							22.4	6.7	6.0
(W) 260-280	5.2	2.8	.7	.0								8.7	4.4	4.0
290-310	2.9	.7	.1									3.8	3.2	2.0
320-340	1.6	.4										2.0	3.0	2.0
	! :	• • • • • • •				• • • • • •	• • • • • • •				• • • • • • • •		• • • • • • • •	
VARIABLE		.4	.2	.1	.0							.6	9.7	8.0
CALM	///////	//////	//////	1111111	//////	///////	///////	///////	//////	///////	'//////	23.5	/////	/////
TOTALS	38.7	28.2	9.0	.7								100.0	3.9	4.0
			TC	TAL NUM	BER OF	OBSERVA	ATIONS	6539						

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 MONTH: SEP HOURS: ALL

LST TO UTC: - 1

CATEGORY A: CEILING GE 200 BUT LESS THAN 1500 FEET WITH VISIBILITY GE 1/2 MILE (0800 METERS). AND/OR

VISIBILITY GE 1/2 MILE (0800 METERS) BUT LESS THAN 3 MILES (4800 METERS) WITH CEILING GE 200 FEET.

WIND SPEED IN KNOTS														
DIRECTION	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL	MRAN	MEDIAN
(DEGREES)	 	• • • • • •	•••••	• • • • • •	•••••	•••••	• • • • • • •	•••••	•••••	•••••	•••••	*	WIND	WIND
(N) 350-010	.8	.7	•••••	•••••	•••••	• • • • • • •		•••••	•••••	•••••	•••••	1.4	4.0	3.0
020-040	1.8	1.1										2.9	3.7	3.0
050-070	4.8	4.9	.5									10.2	4.8	5.0
(E) 080-100	4.2	1.0										5.1	3.1	3.0
110-130	.6					•						.6	2.2	2.5
140-160	.4	.1										.5	2.8	3.0
(S) 170-190	1.0	1.0	.1									2.0	4.7	5.0
200-220	2.1	5.2	2.5	.2	.1							10.1	7.5	8.0
230-250 (W) 260-280	6.7 4.8	2.8	8.1	.1								32.5 8.8	7.3 4.9	8.0 4.0
290-310	2.2	.2	1.2									2.4	2.3	2.0
320-340	1.4	.4										1.8	2.7	2.0
•••••	 • • • • • • • • • • • • • • • • • • •		•••••										•••••	
VARIABLE														
CALM	11111111			///////	///////	'///////	111111	///////	'//////	'//////	'//////	21.5	//////	/////
TOTALS	30.8	35.1	12.4	.3	.1							100.0	4.6	6.0

TOTAL NUMBER OF OBSERVATIONS 1036

C - 4 - 90

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: OCT HOURS: 00-02

	BSI 10 Utc: - I								MONTH: OCI HOORS: 00-02							
WIND SPEED IN RNOTS																
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		25-29		35-39	40-49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND		
(N) 350-010	9.9	.3	•••••	•••••	•••••	•••••	•••••		•••••	•••••	•••••	1.2	3.1	3.0		
020-040	2.2	.4										2.7	2.6	2.0		
050-070	8.6	4.4	.9									13.9	4.2	3.0		
(E) 080-100	6.9	2.0	.3									9.2	3.8	3.0		
110-130	.8											.8	2.1	2.0		
140-160	.4			.1								.6	4.8	2.0		
(S) 170-190	.3	.2	.6	.1	.1							1.3	10.1	11.0		
200-220	1.5	2.5	1.9	.4	.1							6.5	8.0	7.0		
230-250	7.0	10.3	6.3	.9	.3							24.8	7.3	7.0		
(W) 260-280	5.4	.9	.6	.1								7.0	4.0	3.0		
290-310	2.1	1.0	.1	.1								3.3	3.8	2.5		
320-340	1.5	.3										1.9	2.8	2.0		
VARIABLE	: J			•••••	•••••	•••••	• • • • • • •		•••••		•••••		11.0	11.0		
CALM	1111111			,,,,,,,	//////	,,,,,,,,	,,,,,,,	,,,,,,,,	1111111	,,,,,,,,	1111111					
COLET]						,,,,	.,,,,,,	.,,,,,,	.,,,,,,	,,,,,,,	20.3	,,,,,,	,,,,,		
TOTALS	37.6	22.4	11.0	1.7	.5							100.0	4.1	4.0		

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: OCT HOURS: 03-05

DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		PEED IN 25-29		35-39	40~49	50-64	GE 65	TOTAL	MEAN WIND	MEDIA WIND
N) 350-010	.9	.3	•••••	• • • • • •	• • • • • • •		• • • • • •	•••••	•••••	•••••	•••••	1.2	3.6	3.0
020-040	1.5	1.2										2.7	3.8	4.0
050-070	9.1	2.6	.7									12.4	3.7	3.0
E) 080-100	5.1	2.7	1.0									8.8	4.8	4.0
110-130	1.0	.1										1.1	2.7	3.0
140-160	.1											.1	1.0	1.0
s) 170-190	.8	.7	.4	.2								2.1	7.0	5.0
200-220	1.4	2.6	1.4	.7	.7							6.8	9.4	7.5
230-250	7.7	10.1	6.2	1.5	.1							25.6	7.3	7.0
W) 260-280	6.9	1.1	.5	.2								8.8	4.0	3.0
290-310	4.3	.3	.1									4.7	2.7	2.0
320-340	1.4	.3										1.8	3.1	3.0
VARIABLE	<u>:</u> 	1	•••••	•••••		•••••		•••••	•••••	•••••	•••••	.1	7.0	7.0
CALM	1111111	//////	///////	///////	///////	///////	//////	///////	///////	//////	,,,,,,,	23.7	/////	/////
TOTALS	40.2	22.1	10.3	2.6	.8							100.0	4.2	4.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 MONTH: OCT HOURS: 06-08

		LS	T TO UT	C: - 1					MONTE	i: oct	HOUR	S: 06-08	3	
•••••			• • • • • • •	• • • • • • •	WIND S	PEED IN	KNOTS	• • • • • •	•••••		• • • • • •	• • • • • •	• • • • • •	• • • • • • •
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24		30-34	35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
			•••••	• • • • • • •	• • • • • • •	• • • • • • •	•••••	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •		• • • • • •	• • • • • • •
(N) 350-010	.5	.2	.1									.9	3.9	2.5
020-040	1.8	.4										2.3	2.7	2.0
050-070	7.1	4.2	.8									12.1	4.4	4.0
(E) 080-100	4.9	3.9	1.3									10.0	5.0	5.0
110-130	1.1											1.1	1.9	2.0
140-160	.6	.1										.8	3.6	4.0
(S) 170-190	1.2	.8	.2	.1								2.3	5.3	4.0
200-220	1.8	4.5	2.6	1.1	.2							10.3	8.6	8.0
230-250	7.9	9.6	6.0	1.1	.1							24.7	7.2	7.0
(W) 260-280	6.6	.2	.2	.3	.1							7.5	3.6	2.0
290-310	3.1	.4	.1	.1								3.8	3.2	3.0
320-340	2.1	.3										2.4	2.7	2.0
VARIABLE	 	.2	.3	•••••	•••••	•••••	•••••	•••••	•••••	•••••	•••••	.5	10.0	10.0
CALM	///////	//////	//////	//////	//////	///////	//////	///////	//////	///////	///////	21.5	//////	/////
TOTALS	38.7	24.8	11.6	2.7	.4							100.0	4.5	5.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: OCT HOURS: 09-11

		ro	T 10 UI	C: - 1					MONTH	: OCT	HOUR	8: 09-11	L	
• • • • • • • • • • • • • • • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •		WIND 8	PEED IN	KNOTS	• • • • • •	•••••	•••••	•••••	•••••	• • • • • •	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	.4	.6	• • • • • • •		• • • • • •	•••••	• • • • • • •	• • • • • •	• • • • • • •	•••••	•••••	1.1	4.3	5.0
020-040	.8	1.5										2.3	5.3	5.0
050-070	3.8	4.3	1.6									9.7	5.9	6.0
(E) 080~100	9.1	5.7	2.3									17.1	5.1	4.0
110~130	1.9	.3										2.3	3.1	3.0
140~160	.4	.1										.5	2.2	2.0
(S) 170~190	1.6	1.1	.3									3.0	5.1	4.0
200~220	2.4	3.8	4.7	1.3	.4							12.6	9.2	10.0
230-250	6.5	10.2	6.9	1.9	.3							25.8	7.9	8.0
(W) 260-280	5.5	3.2	.8	.6	.1							10.2	5.4	4.0
290~310	2.0	1.1										3.1	4.0	3.0
320~340	.9	.9	.1									1.8	4.9	6.0
VARIABLE	! !		4	• • • • • •			• • • • • • •	•••••		• • • • • • •	• • • • • • •	1.0	9.0	8.0
· - · ·	1													
CALM	//////	//////	//////	//////	//////	'//////	1111111	'//////	'//////	///////	///////	9.6	/////	/////
TOTALS	35.3	33.3	17.1	3.8	.8							100.0	5.9	6.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: OCT HOURS: 12-14

DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		PEED IN 25-29		35-39	40-49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
(N) 350-010	.3	.8	.1	• • • • • •	•••••	•••••	• • • • • • •	• • • • • •	•••••	•••••	• • • • • • •	1.2	5.8	6.0
020-040	.4	1.3	.1									1.8	5.7	6.0
050-070	2.8	3.1	.5									6.5	5.5	5.0
(E) 080-100	5.8	7.0	2.3	.2								15.3	6.0	5.0
110-130	2.2	1.2										3.3	3.7	4.0
140-160	1.0	.1										1.1	2.3	2.0
(8) 170-190	1.5	1.3	.3									3.1	5.2	5.0
200-220	3.0	5.1	4.4	1.9	.4							14.8	8.9	9.0
230-250	6.2	10.6	8.7	2.7	.5							28.8	8.5	8.0
(W) 260-280	4.6	4.1	2.5	.5								11.7	6.5	6.0
290-310	1.7	1.1		.2								3.0	5.2	4.0
320-340	1.4	1.0	.2									2.6	4.8	4.0
VARIABLE	! 	5	1.2	•••••	•••••	•••••	•••••	• • • • • • •		•••••		1.7	10.4	10.0
CALM	11111111	//////	///////	//////	1111111	///////	//////	//////	///////	//////	,,,,,,,	5.1	//////	/////
TOTALS	30.9	37.2	20.3	5.5	.9							100.0	6.7	6.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: OCT HOURS: 15-17

		LS	T TO UT	C: - 1					MONTE	i: OCT	HOUR	S: 15-17	7	
• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	• • • • • •	• • • • • •	• • • • • • •			· · · · · · ·	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • •
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		PEED IN 25-29		35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350 010		• • • • • • • • • • • • • • • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •		•••••		
(N) 350-010	.9	1.3										2.2	4.8	5.0
020-040	2.0	1.6	.2									3.9	4.6	4.0
050~070	2.2	3.5	.9									6.6	5.8	6.0
(E) 080-100	4.0	5.1	2.3									11.3	6.3	6.0
110~130	3.0	.8										3.8	3.4	3.0
140~160	1.4	.2										1.6	2.6	2.0
(8) 170~190	2.5	1.3	.9									4.6	5.4	4.0
200-220	3.5	6.5	2.5	1.0	.2							13.7	7.4	7.0
230~250	7.8	13.0	7.2	1.4	.4	.1						30.0	7.7	8.0
(W) 260-280	3.7	3.2	1.5	.4		.1						8.9	6.6	6.0
290-310	2.6	1.9	.2	.1		,						4.8	4.8	4.0
320-340	1.4	.4										1.8	3.2	2.0
VARIABLE		.1	.4	.1	•••••	•••••	•••••	• • • • • • •	• • • • • • •	• • • • • • •	•••••	.6	11.5	11.0
CALM	1111111	//////	1/////	//////	//////	'//////	111111	///////	'//////	'//////	'//////	6.2	/////	/////
TOTALS	35.0	38.9	16.1	3.0	.6	.2						100.0	6.1	6.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: OCT HOURS: 18-20

DIRECTION	1-4	5-9	10-14	15-19		SPEED IN 25-29		35-39	40-49	50-64	GE 65	TOTAL	MEAN	MEDIAN
(Degrees)	1											*	WIND	WIND
(N) 350-010	1.7	.8	.1	• • • • • • •	•••••	• • • • • • •	•••••	• • • • • • •	•••••	• • • • • •	•••••	2.6	4.0	4.0
020-040	2.9	1.4										4.3	3.7	3.5
050-070	5.6	4.3	.8									10.6	4.7	4.0
(E) 080-100	4.8	4.5	1.0									10.3	5.2	5.0
110-130	1.2	.2										1.4	2.4	2.0
140-160	1.0	.2										1.2	2.7	2.0
(S) 170-190	3.0	.6	.4	.3	.1							4.5	5.2	3.0
200-220	Ī	2.4	1.6		.2							8.1	6.1	5.0
230-250	8.2	12.0	3.7	.8								24.6	6.6	6.0
(W) 260-280	2.7	2.6	.8	.2	.2							6.5	6.2	5.5
290-310	3.2	1.2	.3	-1								4.8	4.2	4.0
320-340	.6	.4										1.1	3.3	2.0
VARIABLE	: 	• • • • • •	•••••	1			•••••	• • • • • • •	•••••	• • • • • •	•••••	.1	16.0	16.0
CALM	1111111	//////	///////		//////	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	//////	///////	///////	///////	'//////			
TOTALS	38.8	30.6	8.7	1.5	.5							100.0	4.4	5.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

E NC FROM BOURLI OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: OCT HOURS: 21-23 WIND SPEED IN KNOTS DIRECTION 1-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-49 50-64 GE 65 TOTAL MEAN MEDIAN (DEGREES) % WIND WIND (N) 350-010 .5 .6 .1 1.3 4.9 5.0 020-040 1.0 1.2 2.2 4.1 5.0 050-070 7.0 4.5 .6 12.2 4.3 4.0 (E) 080-100 5.4 3.8 .5 9.7 4.6 4.0 110-130 1.1 .3 1.4 3.3 3.0 140-160 1.0 .1 .1 1.2 3.5 3.0 (S) 170-190 1.4 .4 .1 .3 2.3 5.6 3.0 200-220 2.4 2.9 1.8 7.8 .2 7.5 7.0 230-250 8.0 9.8 6.9 .4 .1 25.2 6.9 7.0 (W) 260-280 4.1 1.8 .6 6.9 5.0 4.0 290-310 2.2 .8 3.0 1.7 320-340 .2 1.9 2.4 2.0 VARIABLE CALM TOTALS 35.8 26.4 10.7 1.4 100.0 4.1 5.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY LST TO UTC: - 1

STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

ST TO UTC: -	1	MONTH:	OCT	HOURS:	ALL

						SPEED IN						• • • • • • •	• • • • • •	• • • • • • •
DIRECTION	1-4	5-9	10-14					35-39			GE 65	TOTAL	MEAN	MEDIAN
(DEGREES)							•••••	• • • • • • •	•••••	•••••	•••••	*	WIND	WIND
(N) 350-010	.8	.6	.1	•••••	•••••	•••••	•••••	• • • • • •	•••••	•••••	•••••	1.4	4.3	4.0
020-040	1.6	1.1	.0									2.8	4.0	4.0
050-070	5.8	3.9	.8									10.5	4.7	4.0
(E) 080-100	5.7	4.3	1.4	.0								11.5	5.2	4.5
110-130	1.5	.4										1.9	3.1	3.0
140-160	.7	.1	•0	.0								.9	3.0	2.0
(S) 170-190	1.5	.8	.4	.1	.0							2.9	5.7	4.0
200-220	2.5	3.8	2.6	.9	.3							10.1	8.2	8.0
230-250	7.4	10.7	6.5	1.3	.2	.0						26.2	7.5	7.0
(W) 260-280	4.9	2.2	.9	.4	.1	.0						8.4	5.3	4.0
290-310	2.7	1.0	.1	.1								3.8	3.9	3.0
320-340	1.4	.5	-0									1.9	3.5	3.0
VARIABLE	i 	2			• • • • • •	• • • • • •	•••••	• • • • • • •	•••••	•••••	•••••	6	10.3	10.0
CALM	1111111	//////	//////	//////	//////	1111111	111111	///////	///////	///////	//////	17.1	/////	/////
TOTALS	36.5	29.6	13.1	2.8	.6							100.0	5.0	5.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: OCT BOURS: ALL

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CATEGORY A: CRILING GE 200 BUT LESS THAN 1500 FEET WITH VISIBILITY GE 1/2 MILE (0800 METERS).

AND/OR

VISIBILITY GE 1/2 MILE (0800 METERS) BUT LESS THAN 3 MILES (4800 METERS) WITH CEILING GE 200 FEET.

•••••	• • • • • • • •													• • • • • • •
DIRECTION	1 1-4	5_0	10-14	15_19		PEED IN 25-29		35_30	40-49	50-64	CR 65	TOTAL	MEAN	MEDIAN
				13-19										
(DEGREES)	l											*	WIND	WIND
(N) 350-010	.1	• • • • • •	.0	••••••	•••••	•••••	•••••	•••••	••••••	•••••	•••••	.1	4.0	1.0
020-040	1.0	.5										1.5	3.7	3.0
050-070	6.1	3.8	1.3									11.2	4.8	4.0
(E) 080-100	4.6	3.6	1.6									9.9	5.4	5.0
110-130	1.2	.1										1.4	2.7	2.0
140-160	.5	.1		.0								.7	4.0	4.0
(8) 170-190	1.3	1.1	.2	.1	.0							2.9	6.4	5.0
200-220	2.3	5.5	4.0	1.6	.5							13.9	9.1	8.0
230-250	8.8	13.8	8.8	1.6	.5	.0						33.7	7.7	7.0
(W) 260-280	4.3	1.8	.8	.2	.0							7.2	5.3	4.0
290-310	1.2	.4	.1									1.7	3.8	3.0
320-340	.8	.2										1.0	2.8	2.0
VARIABLE	 	• • • • • •	•••••	• • • • • •	•••••	• • • • • • •	•••••	*****	•••••		•••••	•••••	• • • • • •	•••••
CALM	11111111	//////	//////	//////	//////	///////	///////	///////	///////	//////	'//////	14.7	/////	/////
TOTALS	32.2	30.9	16.8	3.5	1.0							100.0	5.7	6.0

TOTAL NUMBER OF OBSERVATIONS 2008

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDARLEM AB/GERMANY PERIOD OF RECORD: JAN 80 ~ DEC 89

LST TO UTC: ~ 1 MONTH: NOV HOURS: 00-02

		LS	T TO UI	C: - 1					MONTE	: NOV	HOUR	s: 00-0	2	
•••••	••••••	• • • • • •	•••••	• • • • • • •	WIND S	PEED IN	KNOTS	• • • • • •	•••••	•••••	•••••	• • • • • • •	• • • • • •	• • • • • • •
Direction (Degrees)	1-4	5-9	10-14	15-19		25-29		35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	1.7	.2	.2	• • • • • •	•••••	• • • • • •		• • • • • • •	•••••	•••••	•••••	2.2	3.3	2.0
020-040	1.5	1.3	.6	.3								3.7	6.6	6.0
050-070	5.1	5.6	2.2	.7	.1							13.7	6.4	6.0
(E) 080-100	6.8	2.1	.7									9.5	4.1	3.0
110-130	.6											.6	2.2	2.0
140-160	.5											.5	2.5	2.5
(8) 170-190	1.3	.5										1.7	3.1	2.0
200-220	1.7	3.3	2.3	.7	.1							8.2	8.2	8.0
230-250	6.9	10.8	4.9	.9	.2							23.8	7.0	7.0
(W) 260-280	4.8	3.2	.7	.1								8.9	4.8	4.0
290-310	1.7	1.1	.2	.1								3.2	4.8	3.5
320-340	.8	.7	.1									1.6	4.6	4.0
VARIABLE		.1	•••••	•••••	•••••	•••••	•••••	• • • • • • •	•••••	•••••	•••••	.1	8.0	8.0
CALM	1111111	//////	//////	//////	//////	///////	///////	///////	///////	//////	///////	22.4	/////	/////
TOTALS	33.4	28.9	11.9	2.8	.4							100.0	4.6	5.0
			TO	TAL NUM	BER OF	observa	SKOITA	870						

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: NOV HOURS: 03-05

		1,0	1 10 01	1					PONT		11001	. UJ-U.	•	
DIRECTION	1-4	5-9	10-14	15-19		SPEED IN 25-29		35-39	40-49	50-64	GE 65	TOTAL		MEDIAN
(DEGREES)	!											•	WIND	WIND
(N) 350-010	.8	.2	.1	*****	•••••	•••••	• • • • • •	• • • • • • •	•••••	• • • • • • •	• • • • • • •	1.1	4.5	3.5
020-040	1.4	1.3	.9									3.6	6.1	6.0
050-070	5.5	5.1	2.6	.2								13.4	6.0	6.0
(B) 080-100	5.3	2.2	1.3	.1								8.8	4.8	4.0
110-130	.3	.2										.6	3.6	4.0
140-160	.5	.1										.6	2.0	1.0
(S) 170-190	1.5	.9										2.4	3.8	4.0
200-220	1.1	3.6	2.0	.8		.1						7.6	8.5	8.0
230~250	6.1	9.9	5.4	1.0		.2						22.6	7.3	7.0
(W) 260-280	6.5	2.6	.6									9.8	4.1	3.0
290-310	2.8	1.5										4.2	3.9	3.0
320-340	1.6											1.6	2.1	2.0
	· · · · · · · · · · ·													
VARIABLE				.1								.1	15.0	15.0
CALM	1111111	//////	'//////	'//////	//////	'//////	//////	'//////	///////	'//////	'//////	23.5	/////	/////
TOTALS	33.4	27.6	12.9	2.2		.3						100.0	4.5	5.0
			m	VIDS T NOTEN		ODCEDUA	BTOKE	071						

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: NOV HOURS: 06-08

		12	T 10 01	C: - 1					MUNTE	i: NOV	nour	B: 00-00	•	
•••••	• • • • • • • •	• • • • • •	•••••	•••••	WIND S	PEED IN	KNOTS	•••••	•••••	• • • • • • •	•••••	• • • • • • •	• • • • • •	• • • • • • •
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		25-29		35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	.8	.6	.1	• • • • • •	•••••	•••••	• • • • • •	•••••	•••••	•••••	•••••	1.5	5.0	3.0
020-040	1.0	.8	.5	.2								2.5	6.6	5.5
050-070	5.4	4.7	3.9	.1								14.0	6.8	6.0
(E) 080-100	6.0	1.8	.8	.1								8.8	4.4	4.0
110-130	1.1	.2										1.4	2.1	1.5
140-160	.5	.1										.6	3.0	2.0
(S) 170-190	1.3	.7			.1							2.1	4.8	3.5
200-220	1.9	3.9	2.4	.6								8.8	8.0	8.0
230-250	6.0	10.6	5.5	.6	.1							22.8	6.9	6.0
(W) 260-280	6.3	2.4	.7	.1								9.5	4.2	3.0
290-310	3.2	.8	.1									4.1	3.0	2.0
320-340	1.3	.2										1.5	2.5	2.0
	 • • • • • • • • • • • • • • • • • • •	• • • • • •												
VARIABLE			.2									.2	11.0	11.0
CALM	///////	//////	//////	//////	///////	'//////	//////	///////	//////	//////	///////	22.3	/////	/////
TOTALS	34.8	26.8	14.2	1.7	.2							100.0	4.6	5.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: NOV HOURS: 09-11 WIND SPEED IN KNOTS DIRECTION 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-49 50-64 GE 65 TOTAL MEAN MEDIAN (DEGREES) WIND WIND (N) 350-010 .3 .8 1.1 4.7 5.0 .9 020-040 1.1 2.8 7.0 .8 8.0 050-070 3.2 4.0 3.7 .3 11.2 7.3 7.0 (E) 080-100 6.0 2.1 2.8 .2 11.2 5.9 4.0 110-130 2.3 .2 2.5 2.4 2.0 140-160 .8 .8 3.1 3.0 .8 (S) 170-190 1.0 .1 1.9 5.4 6.0 200-220 1.8 3.6 3.6 .5 .1 9.6 8.5 9.0 230-250 8.1 12.0 7.6 .5 .3 28.5 7.2 7.0 (W) 260-280 5.1 3.1 .6 8.7 4.6 4.0 290-310 2.3 1.0 3.3 3.3 3.0 320-340 . 5 1.4 3.1 2.0 VARIABLE. .2 12.0 12.0 CALM TOTALS 32.5 29.5 19.2 1.6 100.0 5.4 6.0

TOTAL NUMBER OF OBSERVATIONS 885

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: NOV HOURS: 12-14 WIND SPEED IN KNOTS DIRECTION 1-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-49 50-64 GE 65 TOTAL MEAN MEDIAN (DEGREES) WIND WIND (N) 350-010 .3 .7 .5 1.5 7.4 8.0 1.0 1.0 020-040 .5 .1 2.6 8.3 8.0 050-070 1.5 5.1 2.7 .2 7.7 9.5 7.0 (*) 080-100 6.3 3.6 2.4 .7 13.0 5.9 5.0 110-130 3.2 .3 3.5 2.6 140-160 .9 .1 1.0 2.4 2.0 (8) 170-190 1.0 1.8 .3 3.2 5.8 6.0 200-220 2.5 2.8 4.2 7.8 .2 9.7 8.0 230-250 5.2 11.4 10.8 .8 .2 .1 28.6 8.2 8.0 (W) 260-280 5.6 4.0 290-310 3.4 1.9 .1 5.4 3.8 3.0 320-340 .7 1.0 .2 1.9 5.6 5.0 VARIABLE .3 .1 1.0 10.0 9.0 CALM TOTALS 31.1 34.3 24.2 2.3 .2 100.0 6.3 6.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: NOV HOURS: 15-17

DIRECTION	1 1-4	F_0	10-14	1510		PEED IN		25 20	40.40	EO 64	GE 65	TOTAL	MEAN	MEDIAN
(DEGREES)		3-9	10-14	13-13	20-24	23-29	30-34	33-39	40-49	30~64	GE 03	*	WIND	WIND
(N) 350-010	.7	1.0	.6	•••••	• • • • • • •	• • • • • • •	•••••	• • • • • • •	•••••	• • • • • • •	• • • • • • •	2.3	6.8	6.0
020-040	.8	1.2	.3	.1								2.5	6.5	6.0
050-070	2.1	4.3	2.1	.2								8.8	7.4	7.0
(E) 080-100	7.1	3.4	2.0	.2								12.8	5.4	4.0
110-130	2.7	.3										3.1	2.3	2.0
140-160	.8	.3	.1									1.2	4.1	3.0
(S) 170-190	2.4	.8	1.0									4.2	5.4	4.0
200-220	1.6	3.5	2.3	.3	.1							7.8	8.1	8.0
230-250	6.4	10.8	8.5	.6	.1							26.4	7.5	8.0
(W) 260-280	5.0	4.3	1.1		.1							10.5	5.1	5.0
290-310	3.5	2.0	.5									6.0	4.3	4.0
320-340	1.1	.5										1.6	3.8	3.5
VARIABLE	 			•••••	• • • • • • •	•••••			• • • • • • •	•••••				
												.9	10.3	10.0
CALM	1/////	'//////	'//////	7777777	//////	'//////	//////	'//////	///////	'//////	'//////	12.0	//////	/////
TOTALS	34.2	32.6	19.2	1.4	.3							100.0	5.6	6.0

TOTAL NUMBER OF OBSERVATIONS 885

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: NOV HOURS: 18-20

		PO	T 10 01	C: - 1					MONTE	: NOV	HOOK	3: 10-20	,	
•••••	• • • • • • • •	• • • • • • •	•••••	• • • • • • •	WIND S	PEED IN	KNOTS		•••••	•••••	•••••	• • • • • • •	• • • • • •	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
(N) 350-010	1.4	.6	.2	• • • • • •		•••••	•••••	•••••	•••••	•••••	••••••	2.2	4.9	4.0
020-040	1.5	1.6	.7	.2								4.0	6.1	5.0
050-070	3.7	4.8	2.6	.5								11.6	6.9	6.0
(E) 080-100	5.5	3.8	1.5	.1								10.9	5.4	4.0
110-130	1.7	.3										2.1	3.0	3.0
140-160	1.5	.1										1.6	2.4	2.0
(8) 170-190	1.0	.5	.5	.1								2.1	5.8	4.5
200-220	1.1	4.0	2.4	.3								7.9	8.0	7.0
230-250	9.0	8.6	7.1	.5								25.1	6.6	6.0
(W) 260-280	4.2	3.1	1.0								,	8.4	4.8	4.0
290-310	1.8	1.7	.2									3.8	4.6	5.0
320-340	1.1	.1										1.3	2.5	2.0
VARIABLE	: 				•••••	•••••	•••••		••••••	•••••			10.5	10.0
CALM	1111111	//////	//////	//////	//////	///////	//////	///////	1111111	///////	///////	18.4	/////	
TOTALS	33.5	29.5	16.4	1.8								100.0	4.9	5.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: NOV HOURS: 21-23

••••••	• • • • • • • •	• • • • • •	•••••	•••••	WIND S	PEED IN	KNOTS	•••••	•••••	•••••		• • • • • •	•••••	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	4049	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
(N) 350-010	1.0	.7	1	•••••	• • • • • • •	•••••	• • • • • •	•••••	•••••	•••••	• • • • • • •	1.8	4.2	3.5
020-040	1.4	1.4	.9	.1								3.8	6.6	6.0
050-070	4.4	5.7	2.1	.9								13.0	6.8	6.0
(E) 080-100	7.0	3.0	1.6	.1								11.8	4.9	4.0
110-130	.6											.6	1.6	1.0
140-160	.2	.1										.3	4.0	2.0
(8) 170-190	.7	.3	.2									1.3	5.4	4.0
200-220	1.8	4.8	2.1	.3								9.1	7.5	8.0
230-250	6.9	10.6	5.7	.8	.1							24.1	6.9	6.0
(W) 260-280	4.6	3.8	.6									9.0	4.4	4.0
290-310	1.5	1.5	.1									3.1	4.6	5.0
320-340	.7	.5	.3			•						1.5	5.5	6.0
• • • • • • • • • • • • • • • • • • • •	<u> </u>													•••••
VARIABLE		.1	.3									.5	11.5	12.0
CALM	1111111	//////	///////	//////	//////	///////	//////	///////	///////	//////	///////	20.1	/////	/////
TOTALS	30.8	32.5	14.0	2.2	.1							100.0	4.9	6.0

TOTAL NUMBER OF OBSERVATIONS 867

PERCRYTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: NOV HOURS: ALL

		PS	T TO UT	C: - 1					MONTH	: NOV	HOUR	S: ALL		
••••••	• • • • • • •		• • • • • •	•••••	WIND 8	PEED IN	KNOTS	• • • • • • •	•••••	•••••	•••••	• • • • • • •	• • • • • •	• • • • • • •
DIRECTION	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL	MEAN	MEDIAN
(Degrees)		• • • • • •	•••••	•••••	•••••	•••••	• • • • • •	• • • • • • •	******	• • • • • • •	•••••	*	WIND	WIND
		• • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • • •	•••••	• • • • • • •	•••••	• • • • • • •	• • • • • •	• • • • • •
(N) 350-010	.9	.6	.2									1.7	5.1	4.0
020-040	1.1	1.2	.7	.1								3.2	6.7	6.0
050-070	3.8	4.9	2.8	.4	.0							11.9	6.8	6.0
(E) 080-100	6.3	2.8	1.6	.2								10.9	5.2	4.0
110-130	1.6	.2										1.8	2.5	2.0
140-160	.7	.1	.0									.8	2.9	2.0
(8) 170-190	1.2	.8	.3	.0	.0							2.4	5.0	4.0
200-220	1.7	3.7	2.7	.5	.0	.0						8.6	8.1	8.0
230-250	6.8	10.6	6.9	.7	.1	.0						25.3	7.2	7.0
(W) 260-280	5.3	3.3	.9	.1	.0							9.5	4.7	4.0
290-310	2.5	1.5	.2	.0								4.2	4.0	3.0
320-340	1.0	.4	.1									1.5	3.8	3.0
VARIABLE		2		1	• • • • • •	•••••	•••••	• • • • • •	•••••		•••••		10.6	10.0
												_		
CALM	///////	//////	//////	///////	//////	///////	7/////	'//////	'//////	'//////	'//////	17.9	/////	/////
TOTALS	32.9	30.3	16.6	2.1	.1							100.0	5.1	6.3

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY

PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 MONTH: NOV HOURS: ALL

CATEGORY A: CEILING GE 200 BUT LESS THAN 1500 FEET WITH VISIBILITY GE 1/2 MILE (0800 METERS).

AND/OR

VISIBILITY GE 1/2 MILE (0800 METERS) BUT LESS THAN 3 MILES (4800 METERS) WITH CEILING GE 200 FEET.

DIRECTION 1-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-49 50-64 GE 65 TOTAL MEAN MEDIAN			• • • • • • •	•••••	•••••		SPEED IN		•••••	•••••	•••••	•••••	• • • • • • •	• • • • • •	•••••
(N) 350-010	DIRECTION	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL	mean	MEDIAN
020-040	(DEGREES)		• • • • • •	•••••	•••••	• • • • • •	• • • • • •	• • • • • •		•••••	••••••	•••••	8	WIND	WIND
050-070	(N) 350-010	.8	.1	.1	•••••	• • • • • •	•••••		•••••	•••••	•••••	•••••	1.1	3.2	2.0
(E) 080-100	020-040	1.1	1.0	.4									2.5	5.5	5.0
110-130	050-070	2.8	2.1	1.6	.3	.0							6.9	6.5	6.0
140-160	(E) 080-100	4.5	1.5	.4	.0								6.4	3.8	3.0
(8) 170-190	110-130	1.1					•						1.1	1.9	1.5
200-220	140-160	.9	.1										1.0	2.6	2.0
230-250 7.4 16.2 13.0 1.0 .1 37.6 7.8 8.0 (W) 260-280 4.8 3.3 .9 .0 9.0 4.8 4.0 290-310 1.8 1.0 .1 .0 3.0 4.1 3.0 320-340 .6 .1 .1 .1 .9 3.4 2.0 VARIABLE CALM ///////////////////////////////////	(8) 170-190	1.4	1.2	.1									2.7	4.7	4.0
(W) 260-280	200-220	2.7	5.6	4.7	.5	.0	.0						13.6	8.1	8.0
290-310	230-250	7.4	16.2	13.0	1.0	.1							37.6	7.8	8.0
320-340	(W) 260-280	4.8	3.3	.9		.0							9.0	4.8	4.0
VARIABLE CALM ////////////////////////////////////	290-310	1.8	1.0	.1	•0								3.0	4.1	3.0
CALM ////////////////////////////////////	320-340	.6	.1	.1									.9	3.4	2.0
	VARIABLE	: 	• • • • • •	•••••	•••••	•••••	• • • • • •		•••••	•••••	•••••	•••••	• • • • • • •	•••••	•••••
TOTALS 29.9 32.2 21.4 1.8 .1 100.0 5.6 6.0	CALM	1111111	//////	///////	//////	//////	,,,,,,,	//////	///////	://///	///////	///////	14.4	/////	111111
,	TOTALS	29.9	32.2	21.4	1.8	.1							100.0	5.6	6.0

TOTAL NUMBER OF OBSERVATIONS 2197

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: DEC HOURS: 00-02

• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	• • • • • •	•••••	• • • • • • •	WIND 8	PEED IN	KNOTS	•••••	•••••	• • • • • • •	•••••	•••••	• • • • • •	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		25-29		35-39	40-49	50-64	GE 65	TOTAL %	mean Wind	MEDIAN WIND
(N) 350-010	1.0	.3	.2	• • • • • • •	•••••	• • • • • • •	•••••	· • • • • • • • • • • • • • • • • • • •	•••••	•••••	• • • • • • •	1.6	4.8	4.0
020-040	1.1	.3										1.5	3.8	3.0
050-070	5.0	3.3	.5									8.7	4.3	4.0
(E) 080-100	4.8	1.9	.9									7.6	4.7	4.0
110-130	1.1	.5										1.6	3.4	3.0
140-160	.7	.1										.8	2.6	2.0
(8) 170-190	.3	.8										1.1	4.9	5.0
200-220	2.4	2.0	2.5	.8								7.7	8.1	8.0
230-250	8.8	13.5	5.0	1.5	.2							29.0	6.9	6.0
(W) 260-280	6.3	4.2	3.0	.6								14.0	6.3	5.0
290-310	3.6	2.0	.3	.3	.1							6.5	5.1	3.0
320-340	1.1	.6										1.7	3.7	3.0
VARIABLE	 			1	•••••								11.7	11.0
-														
CALM	///////	//////	//////	//////	///////	'//////	'//////	'//////	'//////	///////	'//////	17.4	//////	/////
TOTALS	36.2	29.6	13.0	3.3	.3							100.0	5.0	5.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: DEC HOURS: 03-05

		по	1 10 01	· - 1					HONTE	· DEC	HOUR	3. V3-U	,	
••••••	• • • • • • •	• • • • • • •		•••••	WIND 8	PEED IN	KNOTS	•••••	• • • • • • •		• • • • • • • •		•••••	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL %	MEAN WIND	MEDIAN WIND
(N) 350-010	1.2	.3	-2	•••••	•••••	•••••	• • • • • •	•••••		•••••	• • • • • • • •	1.8	4.6	4.0
020-040	1.2	.1										1.4	2.8	3.0
050-070	3.7	4.5	.6									8.8	5.3	5.5
(E) 080-100	4.6	1.7	.9	.1								7.3	5.0	4.0
110-130	1.1											1.1	2.2	2.5
140-160	.5											.5	2.0	2.0
(S) 170-190	.9	1.0	.1									2.0	4.9	5.5
200-220	1.8	2.1	2.1	.8	.3							7.2	8.8	8.0
230-250	8.8	12.6	6.2	1.0	.1							28.8	6.9	7.0
(W) 260-280	8.5	5.0	2.9	.6	.2							17.2	5.8	5.0
290-310	2.4	.8	.3	.2	.2							4.0	5.9	4.0
320-340	.6											.6	3.0	3.0
VARIABLE	' 	• • • • • •		1	• • • • • •	•••••		•••••			•••••	 .8	11.6	12.0
CALM	1111111	//////	///////	///////	///////	///////	///////	///////	,,,,,,,	///////	///////	18.6	//////	111111
TOTALS	35.3	28.1	14.0	2.8	.8							100.0	5.0	5.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 MONTH: DEC HOURS: 06-08

		LS	TU OT T	C: - 1					MONTH	: DEC	HOUR	s: 06-0	8	
•••••	• • • • • • • •	• • • • • •	•••••	•••••	WIND C	PEED IN	ERIOTES	• • • • • • •	•••••	• • • • • • •	•••••	• • • • • • •	• • • • • •	• • • • • • •
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		25-29		35-39	40~49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
(N) 350-010	1.0	.4	•••••	•••••	•••••	•••••	•••••	•••••	•••••	• • • • • • •	•••••	1.5	3.4	3.0
020-040	.2	.1	.1									.4	4.3	3.0
050-070	3.5	3.8	.7									8.0	5.6	6.0
(E) 080-100	4.5	1.8	.7	.1								7.1	4.7	4.0
110-130	2.0											2.0	1.9	2.0
140-160	1.0	.1	.1									1.2	3.7	3.0
(S) 170-190	1.1	.6	.1									1.8	3.7	3.0
200-220	1.5	3.1	1.7	.3		.1						6.7	7.7	8.0
230-250	11.1	12.6	6.1	.9	.4							31.1	6.7	6.0
(W) 260-280	7.2	5.0	2.4	.6	.1	.2						15.5	6.3	5.0
290-310	3.9	1.6	.4	.2								6.2	4.2	3.0
320-340	1.8	.4										2.2	3.6	4.0
VARIABLE	 		3	•••••	• • • • • • •	•••••	•••••	• • • • • • •	•••••	• • • • • • •	•••••	3	10.3	10.0
CALM	11111111	//////	///////	///////	//////	///////		///////	///////	//////	//////	16.0	//////	/////
TOTALS	38.8	29.5	12.6	2.1	.5	.3						100.0	4.9	5.0
			TYC	TAT. NUM	BER OF	OBSERVA	TTONS	892						

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: DEC HOURS: 09-11

													•	
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		25-29		35-39	40-49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
• • • • • • • • • • • • • • • • • • • •														
(N) 350-010	.4	.2										.7	4.7	4.0
020-040	.7	.6										1.2	3.8	3.0
050-070	3.9	2.3	.4	.1								6.8	4.7	4.0
(E) 080-100	6.0	2.7	1.4									10.1	5.0	4.0
110-130	2.0	.2										2.2	2.3	2.0
140-160	.9		.1									1.0	2.9	2.0
(S) 170-190	1.0	.6	.1	.2								1.9	5.6	4.0
200-220	2.9	4.4	1.3	.3								9.0	6.4	6.0
230-250	8.9	12.4	8.0	1.2	.2							30.7	7.2	7.0
(W) 260-280	9.2	4.3	2.4	.4	.2	.1						16.7	5.8	4.0
290-310	3.3	1.2	.6	.1								5.2	5.2	4.0
320-340	1.2	.3										1.6	3.5	4.0
VARIABLE			.1									.1	10.0	10.0
CALM	1111111	//////	///////	///////	//////	'//////	//////	'//////	///////	'//////	//////	13.0	/////	//////
TOTALS	40.4	29.2	14.4	2.3	.4	.1						100.0	5.2	5.0
			TO	YTAL NUM	BER OF	OBSERVA	TIONS	903						

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070

STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST

URS: 12-14

T	TO	UTC: -	1	MONTH:	DEC	HOU

				-									•	
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		SPEED IN 25-29		35~39	40-49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
(N) 350-010	1.1	1.3	.6	.1		•••••	•••••			•••••	•••••	3.1	6.5	6.0
020-040	.9	.4										1.3	3.3	3.0
050-070	2.8	2.7	.7									6.1	5.0	5.0
(E) 080-100	7.1	3.9	.8									11.7	4.5	4.0
110-130	1.9											1.9	2.6	3.0
140-160	.7											.7	1.8	1.5
(8) 170-190	1.2	.7										1.9	3.8	3.0
200-220	2.5	4.2	2.8	.4								10.0	7.4	7.0
230-250	8.1	14.9	8.1	1.7	.2							33.0	7.5	7.0
(W) 260-280	5.2	5.1	2.3	1.1	.3							14.0	7.3	7.0
290-310	2.9	1.7	.6									5.1	4.7	4.0
320-340	1.1	1.0										2.1	4.3	4.0
	1													
VARIABLE]		.2	• • • • • •	•••••	• • • • • • •	•••••	•••••	•••••	•••••	•••••	.2	10.0	10.0
CALM	1111111	//////	///////	///////	//////	,,,,,,,	//////	///////	///////	///////	//////	9.0	/////	111111
TOTALS	35.5	35.9	16.1	3.3	.5							100.0	5.8	6.0
			TO	TAL NUM	BER OF	OBSERVA	TIONS	904						

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: DEC HOURS: 15-17

••••••	•••••	• • • • • •	• • • • • • •	• • • • • •	WIND 8	PEED IN	KNOTS	• • • • • • •	•••••	•••••	• • • • • • •		•••••	•••••
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19		25-29		35-39	40-49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND
(N) 350-010	.6	.8	•••••	•••••	•••••			• • • • • •	•••••	•••••	• • • • • • • •	1.3	4.4	5.0
020-040	1.2	.3	.1									1.7	3.9	3.0
050-070	5.3	2.7	.2									8.2	4.3	4.0
(E) 080-100	5.2	3.2	.3									8.8	4.3	4.0
110-130	1.4	.8	.1									2.3	3.9	3.0
140-160	1.1	.1										1.2	2.7	2.0
(S) 170~190	.8	.9										1.7	5.0	5.0
200-220	2.2	4.0	3.2	.2								9.7	7.6	7.0
230-250	8.9	12.6	8.0	.8	.1							30.3	7.1	7.0
(W) 260-280	3.8	5.4	2.0	1.1	.3							12.7	7.5	6.5
290~310	2.9	1.7	.7	.2								5.4	5.5	4.0
320~340	2.3	1.1	.2									3.7	4.5	4.0
	! :				•••••		• • • • • •		• • • • • •	•••••				•••••
VARIABLE		.1	.1									.2	10.0	10.0
CALM	1111111	//////	///////	//////	//////	///////	//////	'//////	//////	//////	'//////	12.8	//////	/////
TOTALS	35.7	33.7	14.9	2.3	.4							100.0	5.4	6.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM BOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: DEC ROURS: 18-20

		100	1 10 01	1				PONTH: DEC HOURD: 10-20						
WIND SPEED IN KNOTS														
DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL	Mean Wind	MEDIAN WIND
(N) 350-010	. 9	1.0	•••••	• • • • • • •	•••••	• • • • • • •	•••••	•••••	•••••	• • • • • •	• • • • • • •	2.0	5.2	5.0
020-040	1.1	.8										2.0	4.3	4.0
050-070	4.4	3.3	.1									7.8	4.2	4.0
(E) 080-100	5.4	3.1	.3									8.9	4.1	3.0
110-130	1.8	.8										2.6	3.5	2.0
140-160	.7											.7	2.7	3.0
(8) 170-190	.6	.7	.3									1.6	6.2	7.5
200-220	1.1	2.5	3.1	.1								6.9	8.2	8.5
230-250	9.8	15.6	4.9	1.6	.1							32.1	6.9	6.0
(W) 260-280	4.6	5.1	.9	.9	.2							11.7	6.7	6.0
290-310	3.7	1.3	1.0	.2	.2			•				6.4	5.9	4.0
320-340	1.0	.2		-1								1.4	4.4	3.0
VARIABLE	' 		•••••	•••••			•••••		•••••	•••••	•••••		16.0	20.0
***************************************		••			• • •								10.0	20.0
CALM	///////	//////	///////	///////	//////	'//////	//////	'//////	'//////	///////	'//////	15.6	/////	//////
TOTALS	35.1	34.5	10.6	2.9	.7							100.0	5.1	5.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: DEC BOURS: 21-23

					-											
•••	•••••		• • • • • •	•••••	•••••		PEED IN	N KNOTS								
	DIRECTION (DEGREES)	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL	MEAN WIND	MEDIAN WIND	
(N)	350-010	.7	.1	.3	•••••	• • • • • • •	•••••	• • • • • •	•••••	•••••	•••••	•••••	1.1	5.0	3.5	
	020-040	1.0	.5	.1									1.6	4.3	4.0	
	050-070	4.4	3.0										7.4	3.8	3.5	
(E)	080-100	5.3	2.8	.3									8.4	4.3	3.0	
	110-130	2.2	.3										2.5	2.6	2.0	
	140-160	.5	.1										.6	3.6	3.0	
(S)	170-190	.2	.3	.1									.7	5.7	6.5	
	200-220	2.0	3.4	2.9	.2								8.5	7.9	8.0	
	230-250	9.9	13.2	5.4	1.4	.3							30.2	6.9	7.0	
(W)	260-280	6.2	5.4	2.2	.6	.1							14.5	6.0	5.0	
	290-310	3.3	1.3	1.0	.1	.6							6.3	6.9	4.0	
	320-340	1.3	.8										2.1	3.8	3.0	
•••	VARIABLE			1	•••••	• • • • • •		• • • • • •	•••••	• • • • • • •		•••••	 .2	9.0	9.0	
	CALM	1111111			1111111	//////	,,,,,,,,	///////	''''		'//////	,,,,,,,,,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
		ļ									,,,,					
	TOTALS	37.0	31.3	12.4	2.3	1.0							100.0	5.1	5.0	

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 ~ DEC 89
LST TO UTC: - 1 MONTH: DEC HOURS: ALL

		LS	T TO UT	C: - 1	MONTH: DEC HOURS: ALL									
***********		• • • • • •	•••••	•••••	WIND S	PEED IN	KNOTS	• • • • • • •	• • • • • • •		•••••	• • • • • • •	• • • • • •	•••••
DIRECTION	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL	mean	MEDIAN
(DEGREES)		• • • • • •			•••••	• • • • • • •	•••••				•••••	*	WIND	WIND
(N) 350-010	.9	.6	.2	.0	•••••	••••••	•••••	•••••	•••••	•••••	•••••	1.6	5.1	4.0
020-040	.9	.4	.0									1.4	3.8	3.0
050-070	4.1	3.2	.4	.0								7.7	4.6	4.0
(E) 080-100	5.4	2.6	.7	.0								8.7	4.6	4.0
110-130	1.7	.3	.0									2.0	2.8	2.0
140-160	.7	.1	.0									.8	2.8	2.0
(S) 170-190	.8	.7	.1	.0								1.6	4.9	5.0
200-220	2.1	3.3	2.4	.4	.0	.0						8.2	7.7	8.0
230-250	9.3	13.4	6.5	1.3	.2							30.6	7.0	7.0
(W) 260-280	6.4	4.9	2.3	.7	.2	•0						14.5	6.4	5.0
290-310	3.3	1.4	.6	.2	.1							5.6	5.4	4.0
320-340	1.3	.6	.0	.0								1.9	4.0	4.0
VARIABLE	: 		3			• • • • • • •	•••••	•••••	•••••	•••••	•••••		11.5	10.0
CALM	1111111	//////	//////	///////	//////	1111111	//////	///////	///////	///////	///////	14.8	/////	/////
TOTALS	36.9	31.6	13.5	2.6	.5							100.0	5.2	5.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY

PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 MONTH: DEC BOURS: ALL

CATEGORY A: CEILING GE 200 BUT LESS THAN 1500 FEET WITH VISIBILITY GE 1/2 MILE (0800 METERS).

AND/OR

VISIBILITY GE 1/2 MILE (0800 METERS) BUT LESS THAN 3 MILES (4800 METERS) WITH CEILING GE 200 FEET.

WIND SPEED IN KNOTS														
DIRECTION	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL	MEAN	MEDIAN
(DEGREES)		• • • • • •	• • • • • •	•••••	• • • • • •	••••••	• • • • • •	•••••	•••••	•••••	• • • • • • • •	*	WIND	WIND
(N) 350-010	.5	.3	.2	•••••	•••••	•••••		•••••	•••••	•••••	• • • • • • • •	1.0	5.4	4.0
020-040	.6	.1	.0									.7	3.1	2.0
050-070	2.8	2.5	.7									5.9	5.2	5.0
(E) 080-100	5.0	2.2	1.2	.0								8.5	5.0	4.0
110-130	1.6	.3										1.9	3.1	3.0
140-160	1.1		.0									1.2	2.6	3.0
(S) 170-190	1.3	.9	.1	.1								2.4	4.5	4.0
200-220	2.5	5.3	4.0	.6	.1	.0						12.6	8.2	8.0
230-250	9.6	17.3	9.7	1.9	.4							38.9	7.6	7.0
(W) 260-280	4.9	3.8	2.3	.5	.2							11.7	6.5	6.0
290-310	2.3	1.0	.6	.1	.0							4.0	5.4	3.0
320-340	.7	.1										.7	2.8	2.0
VARIABLE	: 	• • • • • •	• • • • • •	•••••	• • • • • •	•••••	• • • • • •		•••••	•••••	• • • • • • • •	• • • • • • •	•••••	•••••
CALM	,,,,,,,	//////	//////	//////	//////	//////	//////	///////	///////	//////	///////	10.5	/////	,,,,,,
TOTALS	32.9	33.8	18.8	3.2	.7							100.0	6.0	6.0

TOTAL NUMBER OF OBSERVATIONS 2677

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: ALL HOURS: ALL

		LS	T TO UI	c: - 1						: ALL	HOUR	S: ALL		_
•••••	• • • • • • •	• • • • • •	•••••	•••••		SPEED IN		•••••	•••••	••••••	•••••	• • • • • • •	• • • • • •	•••••
DIRECTION	1-4	5-9	10-14	15-19		25-29		35-39	40-49	50-64	GE 65	TOTAL	MEAN	MEDIAN
(DEGREES)		• • • • • •	•••••	•••••	•••••	• • • • • • •	•••••	•••••	•••••	•••••	••••••	8	WIND	WIND
(N) 350-010	1.5	1.1	.3	.0	•••••	•••••	•••••	•••••	•••••	•••••	•••••	2.9	5.0	4.0
020-040	1.7	1.6	.4	.0								3.7	5.2	5.0
050-070	4.9	4.7	1.5	.2	.0							11.3	5.6	5.0
(E) 080~100	5.5	3.3	1.1	.1	.0							10.0	5.0	4.0
110~130	1.5	.4	.0	.0								1.9	3.4	3.0
140~160	.8	.2	.0	.0								1.1	3.4	3.0
(S) 170~190	1.2	.8	.3	.0	.0							2.3	5.1	4.0
200-220	2.2	3.3	2.0	.4	.1	.0						8.0	7.5	7.0
230-250	7.0	9.5	4.8	.8	.1	.0	.0					22.1	6.9	6.0
(W) 260-280	5.5	3.5	1.0	.2	.0	.0	.0					10.2	5.0	4.0
290-310	3.2	1.7	.3	.0	.0	.0						5.3	4.4	4.0
320-340	1.8	1.0	.1	.0								2.9	4.2	4.0
VARIABLE	.0	4	3			• • • • • •		•••••	• • • • • •	•••••	•••••	8	9.4	9.0
CALM	1111111	//////	//////	'//////	//////	'//////	'//////	'//////	'//////	'//////	'//////	17.4	/////	111111
TOTALS	36.8	31.5	12.1	1.7	.2							100.0	4.8	5.0
	, 50.0	31.3	-2.1		• 2							100.0	7.0	3.0

PERCENTAGE FREQUENCY OF OCCURRENCE SURFACE WIND DIRECTION VERSUS WIND SPEED

FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY

PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 MONTH: ALL HOURS: ALL

CATEGORY A: CEILING GE 200 BUT LESS THAN 1500 FEET WITH VISIBILITY GE 1/2 MILE (0800 METERS).

AND/OR

VISIBILITY GE 1/2 MILE (0800 METERS) BUT LESS THAN 3 MILES (4800 METERS) WITH CEILING GE 200 FEET.

WIND SPEED IN KNOTS DIRECTION 1-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-49 50-64 GE 65 TOTAL MEAN MEDIAN														
DIRECTION	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-49	50-64	GE 65	TOTAL	MEAN	MEDIAN
(DEGREES)	ļ	• • • • • •	•••••	•••••	••••••		•••••	• • • • • • •	•••••	•••••	•••••	*	WIND	WIND
(N) 350-010	.9	.7	.2	.0	••••••		•••••	•••••	•••••	•••••	•••••	1.7	5.1	5.0
020-040	1.3	1.1	.3	.0								2.7	5.2	5.0
050-070	3.5	3.5	1.3	.1	.0							8.4	5.7	5.0
(E) 080-100	4.5	2.4	.7	.1								7.7	4.6	4.0
110-130	1.1	.2	.0									1.3	2.9	2.0
140-160	.6	.1	.0	.0								.8	3.4	3.0
(8) 170-190	1.2	.9	.3	.1	.0							2.4	5.4	5.0
200-220	2.5	5.4	3.7	.9	.2	.0						12.7	8.3	8.0
230-250	7.9	15.5	9.0	1.3	.2	.0						34.0	7.6	7.0
(W) 260-280	4.9	3.5	1.3	.2	.0							9.9	5.4	5.0
290-310	2.0	1.0	.3	.0	.0	.0						3.3	4.5	4.0
320-340	1.0	.4	.0	.0								1.5	3.9	3.0
VARIABLE		• • • • • •	•••••	•••••			•••••	•••••	•••••	•••••	•••••	• • • • • •	•••••	•••••
CALM	1111111	//////	///////	///////	//////	///////	//////	///////	//////	//////	///////	13.4	/////	/////
TOTALS	31.4	34.7	17.1	2.7	. 4							100.0	5.6	6.0

PPPPPPPPP PPPPPPPPPPPPPPPPPPPPPPPPPPPP		•	AAA AAAA	RRRR RRRR	RRRR RRRRR	delededededelede deledededededede	DDDDDDDD DDDDDDDDD		
PP	PP	AA	AA	RR	RR	TT	DD	DD	
PP	PP	AA	AA	RR	RR	TT	DD	DD	
PPPPP	PPPP	AA	AA	RRRR	RRRRR	TT	DD	DD	
PPPPP	PPP	AAAAA	AAAAA	RRRR	RRRR	TT	DD	DD	
PP		AAAAA	AAAAA	RR	RR	TT	DD	DD	
PP		AA	AA	RR	RR	TT	DD	DD	
PP		AA	AA	RR	RR	TT	DDDDDD	DDD	
PP		AA	AA	RR	RR	TT	DDDDDD	DDD	

PART D

CEILING VERSUS VISIBILITY AND SKY COVER SUMMARIES

CEILING VS VISIBILITY--PERCENT OCCURRENCE FREQUENCY (POF).

CREATED FROM HOURLY OBSERVATIONS, THIS SUMMARY IS A BIVARIATE DISTRIBUTION

OF PERCENTAGE FREQUENCY BY CLASSES OF CEILING (FROM ZERO FEET TO 20,000 FEET-
"NO CEILING" IS A SEPARATE CLASS) VERSUS VISIBILITY CLASSES (FROM ZERO MILES

(METERS) TO GREATER THAN OR EQUAL TO 7 STATUTE MILES (11,200 METERS)). THE

- BY RIGHT 3-HOUR STANDARD TIME PERIODS FOR EACH MONTH (ALL YEARS COMBINED).
- BY MONTH (ALL YEARS AND ALL HOURS COMBINED).

TABLES SUMMARIZE THE DATA AS FOLLOWS:

- BY YEAR (ALL YEARS AND ALL HOURS COMBINED).

BECAUSE OF THE CUMULATIVE NATURE OF THESE SUMMARIES, IT IS POSSIBLE TO DETERMINE THE PERCENTAGE OCCURRENCE FREQUENCY (POF) FOR ANY GIVEN CEILING AND/OR VISIBILITY LIMIT(S), EITHER SEPARATELY OR IN ANY COMBINATION.

TOTALS PROGRESS FROM RIGHT TO LEFT AND FROM BOTTOM TO TOP. TO DETERMINE CEILING ALONE, REFER TO THE EXTREME RIGHT-HAND COLUMN (ZERO VISIBILITY).

TO DETERMINE VISIBILITY ALONE, REFER TO THE BOTTOM ROW (ZERO CEILINGS).

DETERMINE THE POF THAT MEETS OR EXCEEDS ANY GIVEN SET OF MAXIMA BY READING THE VALUE AT THE INTERSECTION OF THE APPROPRIATE CRILING ROW AND VISIBILITY COLUMN.

- NOTE 1: IN JANUARY 1968, METAR STATIONS BEGAN REPORTING VISIBILITIES TO 6 STATUTE MILES OR 9000 METERS. VALUES EXCEEDING 9000 METERS ARE REPORTED AS "9999."
- NOTE 2: FOR OVERSEAS CIVILIAN STATIONS REPORTING "CAVOK", ALL CEILINGS GREATER THAN 5000 FEET APPEAR IN THE 5000 FEET CLASS.
- CONVERSIONS: 1 STATUTE MILE = 1,609.344 METERS = .868391 NAUTICAL MILES.
 FOR CONVENIENCE, THE CONVERSION OFTEN USED IS 1 STATUTE MILE = 1,600 METERS.

SKY COVER--PERCENT OCCURRENCE FREQUENCY.

ALSO CREATED FROM HOURLY OBSERVATIONS, THIS SUMMARY GIVES PERCENTAGE OCCURRENCE FREQUENCY (POF) OF SKY COVER IN EIGHTHS FOR SYNOPTIC STATIONS, BUT AS CLEAR, SCATTERED, BROKEN, OVERCAST, PARTIALLY OBSCURRED, OR TOTALLY OBSCURRED FOR AIRWAYS STATIONS. FOR AIRWAYS STATIONS, THIS SUMMARY ALSO GIVES POF FOR SKY COVER GREATER THAN ONE-HALF (I.E., 6/10). DATA IS SUMMARIZED THE SAME AS FOR PREVIOUS TABLE.

NOTE 1. THESE SUMMARIES ARE NOT AVAILABLE FOR METAR REPORTING STATIONS.

NOTE 2. AIRWAYS STATIONS THAT HAVE REPORTED IN SYNOPTIC CODE HAVE HAD THEIR SYNOPTIC SKY COVER REPORTS CONVERTED AS FOLLOWS:

 0/8
 CLEAR

 1/8 THRU 4/8
 SCATTERED

 5/8 THRU 7/8
 BROKEN

 8/8
 CVERCAST

NOTE 3. "PARTIAL OBSCURATION" IS A SEPARATE CATEGORY NOT INCLUDED IN COMPUTATION OF "GREATER THAN 1/2" PERCENTAGES. "TOTAL OBSCURATIONS," HOWEVER, ARE INCLUDED.

OPERATING LOCATION "A" PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY USAFETAC, ASHEVILLE NC FROM HOURLY OBSERVATIONS

STA	TION 1	NUMBER:	106070				NDAHLEM	AB/GER	MANY					- 08 MAT	DEC 89		
		1		LST	TO UTC:	; - 1					MONTH:	JAN	HOURS:	00-02			
CEI	LING	• • • • • •		• • • • • • •	• • • • • • •	,	VISIBIL	TY IN I	METERS		• • • • • • •					• • • • • •	•••••
I	N	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	Œ	GE	GE	GE	Œ
FE	BT	112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
• • •		• • • • • •	• • • • • • •				• • • • • • •		• • • • • •		• • • • • •		• • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • •
NO	CEIL	11.5	11.9	14.6	15.7	16.4	17.1	18.2	19.3	19.4	20.4	20.6	20.9	21.3	21.4	21.7	22.0
æ	20000	12.3	12.8	15.5	16.6	17.2	18.0	19.1	20.3	20.4	21.4	21.6	21.9	22.2	22.4	22.7	23.0
	18000	12.3	12.8	15.5	16.6	17.2	18.0	19.1	20.3	20.4	21.4	21.6	21.9	22.2	22.4	22.7	23.0
	16000	12.3	12.8	15.5	16.6	17.2	18.0	19.1	20.3	20.4	21.4	21.6	21.9	22.2	22.4	22.7	23.0
	14000	12.3	12.8	15.5	16.6	17.2	18.0	19.1	20.3	20.4	21.4	21.6	21.9	22.2	22.4	22.7	23.0
	12000	12.4	12.9	15.6	16.7	17.3	18.1	19.2	20.4	20.5	21.5	21.7	22.0	22.4	22.5	22.8	23.1
Œ	10000	13.1	13.5	16.4	17.4	18.1	18.9	20.0	21.2	21.3	22.2	22.5	22.8	23.1	23.2	23.6	23.9
GE	9000	13.6	14.1	17.0	18.1	18.8	19.5	20.6	21.8	21.9	22.9	23.1	23.4	23.8	23.9	24.2	24.5
Œ	8000	14.8	15.3	18.3	19.4	20.6	21.4	22.5	23.7	23.8	24.8	25.0	25.3	25.6	25.7	26.1	26.4
Œ	7000	14.8	15.3	18.4	19.5	20.7	21.5	22.7	23.9	24.0	25.0	25.2	25.5	25.8	26.0	26.3	26.6
GE	6000	15.2	15.6	18.9	20.0	21.2	21.9	23.1	24.3	24.4	25.4	25.6	26.0	26.3	26.4	26.7	27.0
		ĺ															
GE	5000	15.3	15.7	19.1	20.2	21.4	22.1	23.3	24.5	24.6	25.6	25.8	26.2	26.5	26.6	26.9	27.3
Œ	4500	16.6	17.0	20.4	21.5	22.7	23.4	24.6	25.8	15.0	26.9	27.2	27.6	27.9	28.0	28.4	28.7
Œ	4000	17.7	18.1	21.6	22.7	23.9	24.6	26.1	27.3	27.4	28.4	28.6	29.0	29.3	29.4	29.8	30.1
GE	3500	19.6	20.2	23.8	24.9	26.1	26.8	28.2	29.4	29.6	30.5	30.8	31.2	31.5	31.6	32.0	32.3
GE	3000	22.5	23.0	26.9	28.1	29.4	30.2	31.6	33.0	33.2	34.1	34.4	34.8	35.1	35.2	35.6	35.9
GE	2500	23.9	24.5	28.6	29.8	31.1	31.8	33.3	34.7	34.8	35.8	36.0	36.5	36.9	37.0	37.3	37.6
GE	2000	28.1	29.0	33.4	34.7	36.2	37.0	38.5	40.5	40.6	41.5	41.9	42.4	42.7	42.9	43.2	43.5
GE	1800	30.1	31.0	35.4	37.1	38.9	39.7	41.2	43.4	43.5	44.6	44.9	45.5	45.8	45.9	46.2	46.6
GE	1500	34.1	35.0	40.1	42.0	44.5	45.5	47.2	49.4	49.5	50.6	50.9	51.5	51.8	52.0	52.3	52.7
GE	1200	38.1	39.1	44.6	46.6	49.2	50.3	52.0	54.2	54.3	55.9	56.3	56.8	57.1	57.4	57.8	58.1
		ł															
GE	1000	41.3	42.7	48.9	50.8	54.1	55.4	57.1	59.3	59.4	61.1	61.4	61.9	62.3	62.5	62.9	63.2
Œ	900	41.9	43.3	49.5	51.5	54.9	56.2	58.0	60.2	60.5	62.4	62.7	63.2	63.6	63.8	64.2	64.6
GB	800	43.3	44.7	51.3	53.2	56.7	58.0	60.0	62.3	62.6	64.6	65.0	65.5	65.9	66.1	66.5	66.8
Œ	700	45.8	47.2	54.5	57.0	60.6	62.2	64.7	67.0	67.6	69.8	70.4	71.0	71.3	71.5	72.0	72.3
GE	600	46.9	48.3	56.9	59.5	63.5	65.0	67.8	70.1	70.9	73.1	74.0	74.8	75.1	75.4	75.8	76.1
GE	500	48.1	49.5	58.6	61.4	66.2	68.0	71.2	73.8	75.0	77.3	78.6	79.4	79.7	80.0	80.5	80.8
Œ	400	48.9	50.3	59.8	62.6	68.4	70.6	73.8	76.6	77.9	80.6	82.2	83.0	83.3	83.9	84.3	84.6
GE	300 200	49.0	50.4 50.4	60.1 60.1	62.9 63.1	68.8 69.1	71.0 71.3	75.1 75.9	78.2 79.2	79.7 80.8	82.9 84.1	84.5 86.4	85.4 87.7	85.7 88.4	86.4 89.5	86.8	87.1 90.9
GE	100	49.0	50.4	60.1	63.1	69.1	71.3	75.9 75.9	79.2	80.8	84.3	87.1	88.9	90.0	91.6	90.4 94.4	90.9
95	100	**.``	JU. 4	30.1	05.1	03.1	11.3	13.3	13.2	00.0	04.3	07.1	00.9	30.0	31.0	24.4	33.3
GE	000	49.0	50.4	60.1	63.1	69.1	71.3	75.9	79.2	80.8	84.3	87.1	88.9	90.1	91.7	94.5	100.0
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TOTAL NUMBER OF OBSERVATIONS 917

D - 2 - 1

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: JAN HOURS: 03-05 CRITATING VISTRILITY IN METERS IN GE GE GE GE GE GE Œ GE GR GE Œ GR GR GE GR GR FEET 112 90 80 60 48 40 32 24 20 16 12 10 OR 06 04 00 20.2 20.3 NO CRIT. 12.4 12.9 16.4 17.3 18.1 19.3 19.5 20 - R 21.6 21.8 21.9 22.6 22.8 22.9 20.5 22.6 GE 20000 13.7 17.2 18.1 19.0 20.3 21.2 21.3 21.8 22.8 22.9 23.8 23.9 13.1 6. ڏ2 GR 18000 13.1 13.7 17.2 18.1 19.0 20.3 20.5 21.2 21.3 21.8 22.6 22.8 22.9 23.6 23.8 23.9 GE 16000 13.1 13.7 17.2 18.1 19.0 20.3 20.5 21.2 21.3 21.8 22.6 22.8 22.9 23.6 23.8 23.9 GE 14000 13.1 13.7 17.2 18.1 19.0 20.3 20.5 21.2 21.3 21.8 22.6 22.8 22.9 23.6 23.8 23.9 GE 12000 13.1 13.7 17.2 18.1 19.0 20.3 20,5 21.3 21.8 22.6 22.8 22.9 23.6 24.4 **GR 10000** 13.6 14.1 17.7 18.7 19.5 20.8 21.1 21.7 21.8 22.4 23.1 23.2 23.5 24.1 24.3 GE 9000 13.8 14.3 18.1 19.3 20.2 21.5 21.7 22.4 22.5 23.0 23.8 24.0 24.1 24.8 25.0 25.1 8000 20.8 21.8 24.1 26.0 19.7 23.5 24.2 25.0 25.7 26.7 27.0 GE 15.0 15.6 23.1 26.1 26.9 GE 7000 15.1 15.7 19.8 21.0 21.9 23.2 23.6 24.2 24.3 25.1 25.8 26.1 26.2 26.8 27.0 27.1 GE 6000 15.3 16.0 20.1 23.9 24.5 24.6 25.4 26.2 26.4 27.1 27.5 21.3 22.3 23.6 26.5 27.4 GE 5000 15.4 16.1 20.2 21.4 22.4 23.7 24.0 24.6 24.8 25.5 26.3 26.5 26.6 27.3 27.5 27.6 4500 27.6 GE 16.2 16.8 21.2 22.4 23.7 25.0 25.3 26.0 26.1 26.8 27.9 28.1 28.8 29.0 29.1 GE 4000 17.5 23.0 24.3 26.2 26.8 26.9 27.7 28.4 28.8 29.0 29.6 16.8 21.8 25.6 29.9 30.0 GE 3500 18.1 19.0 23.3 24.5 26.0 27.3 27.8 28.4 28.6 29.3 30.1 30.4 30.6 31.3 31.6 31.5 30.6 GE 3000 20.6 21.6 26.3 27.6 29.3 31.2 31.9 32.0 32.8 33.6 33.9 34.1 34.7 35.0 35.1 GR 2500 22.5 27.1 28.4 33.1 33.2 34.0 35.3 35.9 21.5 30.2 31.5 32.4 34.7 35.1 36.2 36.3 GE 2000 25.5 26.5 31.8 33.1 34.9 36.2 37.0 38.1 38.2 39.0 39.7 40.1 40.3 40.9 41.2 41.3 GE 1800 26.6 27.6 33.2 34.5 36.8 38.4 39.5 40.7 40.8 41.6 42.3 42.7 42.9 43.5 43.8 43.9 1500 CF 30.7 31.7 37.5 38.8 41.6 43.9 45.0 46.8 47.1 48.0 48.9 49.2 49.4 50.1 50.3 50.4 1200 GE 34.3 35.4 41.5 43.0 45.8 48.1 49.3 51.1 51.5 52.7 53.5 53.9 54.1 54.7 54.9 55.0 GE 1000 37.9 39.0 45.2 46.8 49.8 52.4 53.9 55.7 56.1 57.3 58.2 58.5 58.7 59.4 59.6 59.7 GE 900 38.8 39.8 46.3 48.1 51.1 53.7 55.2 57.0 57.5 58.7 59.9 60.3 60.5 61.1 61.3 61.5 GR 800 39.8 40.9 47.4 49.3 52.4 55.0 56.6 58.4 59.0 60.3 61.7 62.0 62.2 62.9 63.1 63.2 700 GE 42.0 43.2 50.7 52.8 56.6 59.8 61.9 63.8 64.6 65.9 67.4 67.8 68.0 68.6 68.8 68.9 GE 600 67.3 70.2 43.2 44.4 52.9 55.0 59.1 62.3 64.5 66.4 68.6 70.6 70.8 71.4 71.7 71.8 GE 500 44.0 45.3 54.9 57.2 62.2 65.7 68.2 70.5 71.4 73.1 74.8 75.1 75.6 76.2 76.4 76.5 GE 400 46.1 78.6 AA.A 56.0 58.3 64.1 68.0 71.3 73.9 75.0 76.7 78.9 79.5 80.1 80.3 80.5 GE 300 44.8 65.0 69.2 75.7 77.0 78.9 81.2 82.7 46.1 56.5 58.8 73.1 81.5 82.1 83.1 83.2 GE 200 76.5 78.4 44.8 46.1 56.5 59.1 65.7 69.9 73.8 80.7 83.2 83.8 34.8 86.4 87.4 87.6 100 77.0 78.9 89.4 GE 44.8 46.1 56.5 59.1 65.8 70.1 74.3 81.3 84.0 85.5 93.9 99.5 GE 000 44.8 46.1 56.5 59.1 65.8 70.1 74.3 77.0 78.9 81.3 84.0 85.6 86.6 89.5 94.0 100.0

TOTAL NUMBER OF OBSERVATIONS 921

D - 2 - 2

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

PERT 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 04 00 05 05 04 00 05 05 05 05 05 05 05 05 05 05 05 05				DEC 89		ORD: JA		PERIOD MONTH:		AANY	AB/GER	ndahlem		TO UTC:		106070	number:	TION 1	STA
IN GE	•••	• • • •	· • • • •	• • • • • • •	•••••		•••••	• • • • • • •	• • • • • • •				••••••	• • • • • •	• • • • • •	• • • • • • •	• • • • • •		• • •
PERT 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 04 00 05 05 04 00 05 05 05 05 05 05 05 05 05 05 05 05	GE		OP	æ.	OP	æ	OP	æ	CP.					æ	CP.	œ	CP.		
NO CEIL 11.4 11.6 14.2 14.9 16.7 17.2 17.5 17.7 18.1 18.4 18.7 19.2 19.2 19.6 20.0 20 GE 20000 13.2 13.4 16.1 17.0 18.8 19.4 19.7 19.9 20.2 20.6 20.9 21.3 21.3 21.8 22.2 23 GE 18000 13.2 13.4 16.1 17.0 18.8 19.4 19.7 19.9 20.2 20.6 20.9 21.3 21.3 21.8 22.2 23 GE 16000 13.2 13.4 16.1 17.0 18.8 19.4 19.7 19.9 20.2 20.6 20.9 21.3 21.3 21.8 22.2 23 GE 14000 13.2 13.4 16.1 17.0 18.8 19.4 19.7 19.9 20.2 20.6 20.9 21.3 21.3 21.8 22.2 23 GE 14000 13.2 13.4 16.1 17.0 18.8 19.4 19.7 19.9 20.2 20.6 20.9 21.3 21.3 21.8 22.2 23 GE 12000 13.2 13.4 16.1 17.0 18.8 19.4 19.7 19.9 20.2 20.6 20.9 21.3 21.3 21.8 22.2 23 GE 2000 13.2 13.4 16.1 17.0 18.8 19.4 19.7 19.9 20.2 20.6 20.9 21.3 21.3 21.8 22.2 23 GE 2000 13.7 14.0 16.8 17.6 19.6 20.1 20.5 20.7 21.0 21.4 21.8 22.2 22.2 22.6 23.1 23 GE 8000 14.7 15.0 17.9 18.7 20.7 21.2 21.5 21.9 22.2 22.7 23.2 23.6 23.6 24.0 24.5 24.9	00																ı		
GE 20000 13.2 13.4 16.1 17.0 18.8 19.4 19.7 19.9 20.2 20.6 20.9 21.3 21.3 21.8 22.2 22.6 28 18000 13.2 13.4 16.1 17.0 18.8 19.4 19.7 19.9 20.2 20.6 20.9 21.3 21.3 21.8 22.2 22.6 28 16000 13.2 13.4 16.1 17.0 18.8 19.4 19.7 19.9 20.2 20.6 20.9 21.3 21.3 21.8 22.2 22.6 28 14000 13.2 13.4 16.1 17.0 18.8 19.4 19.7 19.9 20.2 20.6 20.9 21.3 21.3 21.8 22.2 22.6 22.0 22.0 22.0 22.0 22.0 22.0	• • •			• • • • • • • •				• • • • • • •		• • • • • • •					• • • • • • •	• • • • • • •		••••	•••
GE 20000 13.2 13.4 16.1 17.0 18.8 19.4 19.7 19.9 20.2 20.6 20.9 21.3 21.3 21.8 22.2 22.6 28 18000 13.2 13.4 16.1 17.0 18.8 19.4 19.7 19.9 20.2 20.6 20.9 21.3 21.3 21.8 22.2 22.6 28 16000 13.2 13.4 16.1 17.0 18.8 19.4 19.7 19.9 20.2 20.6 20.9 21.3 21.3 21.8 22.2 22.6 28 14000 13.2 13.4 16.1 17.0 18.8 19.4 19.7 19.9 20.2 20.6 20.9 21.3 21.3 21.8 22.2 22.6 22.0 22.0 22.0 22.0 22.0 22.0																	İ	1	
GE 18000 13.2 13.4 16.1 17.0 18.8 19.4 19.7 19.9 20.2 20.6 20.9 21.3 21.3 21.8 22.2 23.6 24.0 24.5 24.9 24.5 26.6 20.9 14.7 15.0 18.8 19.4 19.7 21.9 22.2 22.5 23.2 23.6 24.0 24.5 24.9 24.5 24.9 24.5 24.9 24.5 24.9 24.5 24.9 24.5 24.9 24.5 24.9 24.5 24.9 24.5 24.9 24.5 24.9 24.5 24.9 24.5 24.9 24.5 24.9 24.5 24.9 24.0 24.5 24.9 24.5 24.9 24.0 24.5 24.9 24.9 24.0 24.5 24.9 24.9 24.0 24.5 24.9 24.9 24.0 24.5 24.9 24.9 24.0 24.5 24.9 24.9 24.0 24.5 24.9 24.9 24.0 24.5 24.9 24.9 24.0 24.5 24.9 24.9 24.9 24.0 24.5 24.9 24.9 24.9 24.9 24.9 24.9 24.9 24.9	0.0	20	20.0	19.6	19.2	19.2	18.7	18.4	18.1	17.7	17.5	17.2	16.7	14.9	14.2	11.6	11.4	CEIL	NO
GE 18000 13.2 13.4 16.1 17.0 18.8 19.4 19.7 19.9 20.2 20.6 20.9 21.3 21.3 21.8 22.2 23.6 24.0 24.5 24.9 24.5 26.6 20.9 14.7 15.0 18.8 19.4 19.7 21.9 22.2 22.5 23.2 23.6 24.0 24.5 24.9 24.5 24.9 24.5 24.9 24.5 24.9 24.5 24.9 24.5 24.9 24.5 24.9 24.5 24.9 24.5 24.9 24.5 24.9 24.5 24.9 24.5 24.9 24.5 24.9 24.5 24.9 24.0 24.5 24.9 24.5 24.9 24.0 24.5 24.9 24.9 24.0 24.5 24.9 24.9 24.0 24.5 24.9 24.9 24.0 24.5 24.9 24.9 24.0 24.5 24.9 24.9 24.0 24.5 24.9 24.9 24.0 24.5 24.9 24.9 24.0 24.5 24.9 24.9 24.9 24.0 24.5 24.9 24.9 24.9 24.9 24.9 24.9 24.9 24.9																			
GE 16000 13.2 13.4 16.1 17.0 18.8 19.4 19.7 19.9 20.2 20.6 20.9 21.3 21.3 21.8 22.2 23.6 14000 13.2 13.4 16.1 17.0 18.8 19.4 19.7 19.9 20.2 20.6 20.9 21.3 21.3 21.8 22.2 23.6 12000 13.2 13.4 16.1 17.0 18.8 19.4 19.7 19.9 20.2 20.6 20.9 21.3 21.3 21.8 22.2 23.6 12000 13.3 13.5 16.2 17.1 19.0 19.6 19.9 20.1 20.5 20.9 21.2 21.6 21.6 22.1 22.5 23.6 20.9 21.3 21.8 22.2 23.6 20.9 21.3 21.8 22.2 23.6 23.1 23.8 23.8 24.2 24.7 24.6 26.0 14.7 15.0 18.8 20.8 21.3 21.6 22.0 22.3 22.9 23.4 23.8 23.8 24.2 24.7 24.6 26.0 14.7 15.0 18.2 19.0 21.0 21.5 21.9 22.2 22.5 23.2 23.6 24.0 24.5 24.9 24.9 24.9 24.9 24.9 24.9 24.9 24.9	2.2 2.2																		
GE 14000 13.2 13.4 16.1 17.0 18.8 19.4 19.7 19.9 20.2 20.6 20.9 21.3 21.3 21.8 22.2 22.6 E 12000 13.2 13.4 16.1 17.0 18.8 19.4 19.7 19.9 20.2 20.6 20.9 21.3 21.3 21.8 22.2 22.6 E 10000 13.3 13.5 16.2 17.1 19.0 19.6 19.9 20.1 20.5 20.9 21.2 21.6 21.6 22.1 22.5 22.6 20.0 20.0 13.7 14.0 16.8 17.6 19.6 20.1 20.5 20.7 21.0 21.4 21.8 22.2 22.2 22.6 23.1 22.6 23.1 22.6 23.0 14.7 15.0 17.9 18.7 20.7 21.2 21.5 21.9 22.2 22.7 23.2 23.6 23.6 23.6 24.0 24.5 24.6 26.0 14.7 15.0 18.2 19.0 21.0 21.5 21.9 22.2 22.5 23.2 23.6 23.8 24.2 24.7 24.9 24.9 24.9 24.9 24.9 24.9 24.9 24.9	2.2																		
GE 12000 13.2 13.4 16.1 17.0 18.8 19.4 19.7 19.9 20.2 20.6 20.9 21.3 21.3 21.8 22.2 23.6 10000 13.3 13.5 16.2 17.1 19.0 19.6 19.9 20.1 20.5 20.9 21.2 21.6 21.6 22.1 22.5 23.6 9000 13.7 14.0 16.8 17.6 19.6 20.1 20.5 20.7 21.0 21.4 21.8 22.2 22.2 22.6 23.1 23.6 8000 14.7 15.0 17.9 18.7 20.7 21.2 21.5 21.9 22.2 22.7 23.2 23.6 23.6 24.0 24.5 24.6 GE 7000 14.7 15.0 18.0 18.8 20.8 21.3 21.6 22.0 22.3 22.9 23.4 23.8 23.8 24.2 24.7 24.6 GE 6000 14.7 15.0 18.2 19.0 21.0 21.5 21.9 22.2 22.5 23.2 23.6 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.0 24.5 24.9 24.0 24.0 24.0 24.5 24.9 24.0 24.0 24.0 24.5 24.9 24.0 24.0 24.0 24.0 24.0 24.0 24.0 24.0	2.2																		
GE 10000 13.3 13.5 16.2 17.1 19.0 19.6 19.9 20.1 20.5 20.9 21.2 21.6 21.6 22.1 22.5 23.6 9000 13.7 14.0 16.8 17.6 19.6 20.1 20.5 20.7 21.0 21.4 21.8 22.2 22.2 22.6 23.1 23.6 8000 14.7 15.0 17.9 18.7 20.7 21.2 21.5 21.9 22.2 22.7 23.2 23.6 23.6 24.0 24.5 24.6 GE 7000 14.7 15.0 18.0 18.8 20.8 21.3 21.6 22.0 22.3 22.9 23.4 23.8 23.8 24.2 24.7 24.6 GE 6000 14.7 15.0 18.2 19.0 21.0 21.5 21.9 22.2 22.5 23.2 23.6 24.0 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.0 24.5 24.9 24.0 24.0 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.0 24.5 24.9 24.0 24.0 24.0 24.5 24.9 24.0 24.0 24.0 24.5 24.9 24.0 24.0 24.0 24.5 24.9 24.0 24.0 24.0 24.0 24.0 24.5 24.9 24.0 24.0 24.0 24.0 24.0 24.0 24.0 24.0	2.2																		
GE 9000 13.7 14.0 16.8 17.6 19.6 20.1 20.5 20.7 21.0 21.4 21.8 22.2 22.2 22.6 23.1 23.6 8000 14.7 15.0 17.9 18.7 20.7 21.2 21.5 21.9 22.2 22.7 23.2 23.6 23.6 24.0 24.5 24.6 26.7 7000 14.7 15.0 18.0 18.8 20.8 21.3 21.6 22.0 22.3 22.9 23.4 23.8 23.8 24.2 24.7 24.6 6000 14.7 15.0 18.2 19.0 21.0 21.5 21.9 22.2 22.5 23.2 23.6 24.0 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.5 24.9 24.0 24.0 24.0 24.5 24.9 24.0 24.0 24.0 24.5 24.9 24.0 24.0 24.0 24.5 24.9 24.0 24.0 24.0 24.0 24.0 24.0 24.0 24.0																		_	
GE 8000 14.7 15.0 17.9 18.7 20.7 21.2 21.5 21.9 22.2 22.7 23.2 23.6 23.6 24.0 24.5 24.0 24.5 26 25 25 25 25 25 25 25 25 25 25 25 25 25	2.5	22	22.5	22.1	21.6	21.6	21.2	20.9	20.5	20.1	19.9	19.6	19.0	17.1	16.2	13.5	13.3	10000	Œ
GE 7000 14.7 15.0 18.0 18.8 20.8 21.3 21.6 22.0 22.3 22.9 23.4 23.8 23.8 24.2 24.7 24 GE 6000 14.7 15.0 18.2 19.0 21.0 21.5 21.9 22.2 22.5 23.2 23.6 24.0 24.0 24.5 24.9 24	3.1	23	23.1	22.6	22.2			21.4	21.0	20.7	20.5	20.1	19.6	17.6	16.8	14.0			Œ
GE 6000 14.7 15.0 18.2 19.0 21.0 21.5 21.9 22.2 22.5 23.2 23.6 24.0 24.0 24.5 24.9 24	4.5																1		
	4.7																		
GR 5000 14.8 15.2 18.3 19.2 21.1 21.6 22.0 22.3 22.6 23.3 23.7 24.1 24.6 25.0 29	4.9	24	24.9	24.5	24.0	24.0	23.6	23.2	22.5	22.2	21.9	21.5	21.0	19.0	18.2	15.0	14.7	6000	GE
	5.0	25	25.0	24.6	24.1	24.1	23.7	23.3	22.6	22.3	22.0	21.6	21.1	19.2	18.3	15.2	14.8	5000	GR
	5.6																		
	7.6																		Œ
GR 3500 18.2 18.5 22.6 23.7 25.6 26.2 26.5 26.8 27.2 28.0 28.5 28.9 28.9 29.3 29.8 29	9.8	29	29.8	29.3	28.9	28.9	28.5	28.0	27.2	26.8	26.5	26.2	25.6	23.7	22.6	18.5	18.2	3500	GE
GB 3000 20.2 20.7 25.2 26.3 28.2 29.0 29.3 30.1 30.5 31.4 31.8 32.4 32.4 32.8 33.2 3	3.2	33	33.2	32.8	32.4	32.4	31.8	31.4	30.5	30.1	29.3	29.0	28.2	26.3	25.2	20.7	20.2	3000	Œ
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	4.2																		
313 313 313 410 431 4010 4011 4313 3013 3110 3314 3310 3314	2	34	34.2	33.0	33.4	33.4	32.0	72.5	J1.2	30.3	43.3	40.2	40.0	43.3	41.0	33.3	34.3	1200	
GR 1000 38.3 39.1 46.2 47.9 51.6 53.2 54.8 56.1 56.7 58.0 58.5 59.2 59.6 60.1 60	0.1	60	60.1	59.6	59.2	59.2	58.5	58.0	56.7	56.1	54.8	53.2	51.6	47.9	46.2	39.1	38.3	1000	GE
GR 900 39.8 40.6 47.8 49.7 53.5 55.1 56.6 58.0 58.7 60.1 60.8 61.5 61.5 61.9 62.3 62	2.3	62	62.3	61.9	61.5	61.5	60.8	60.1	58.7	58.0	56.6	55.1	53.5	49.7	47.8	40.6	39.8	900	Œ
GE 800 41.6 42.3 49.9 51.7 55.6 57.5 59.0 60.4 61.3 62.8 63.9 64.5 64.5 64.9 65.4 69	5.4	65	65.4	64.9	64.5	64.5	63.9	62.8	61.3	60.4	59.0	57.5	55.6	51.7	49.9	42.3	41.6	800	Œ
	8.8																		
GE 600 43.7 44.7 53.0 55.5 59.7 61.9 63.9 65.4 66.3 67.9 69.0 69.7 69.7 70.1 70.6 70	0.6	70	70.6	70.1	69.7	69.7	69.0	67.9	66.3	65.4	63.9	61.9	59.7	55.5	53.0	44.7	43.7	600	Œ
GE 500 44.9 45.9 56.1 58.8 63.6 65.8 67.9 69.7 71.1 72.7 74.5 75.1 75.1 75.5 76.0 70	6.0	76	76.0	75 S	75 1	75 1	74 B	72 7	71 1	60 7	67 0	65.0	67 6	E0 0	SS 1	45 Q	44.0	500	æ
	8.8																		
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	8.6																		
GE 100 45.7 46.6 57.0 60.0 66.5 69.0 72.1 75.2 77.1 79.3 83.8 85.4 87.2 90.0 94.2 99	9.1	99	94.2	90.0	87.2	85.4	83.8	79.3	77.1	75.2	72.1	69.0	66.5	60.0	57.0	46.6	45.7	100	GE
GE 000 45.7 46.6 57.0 60.0 66.5 69.0 72.1 75.2 77.1 79.3 83.8 85.4 87.2 90.0 94.2 100	0.0	100	94.2	90.0	87.2	85.4	83.8	79.3	77.1	75.2	72.1	69.0	66.5	60.0	57.0	46.6	45.7	000	GE

TOTAL NUMBER OF OBSERVATIONS 924

D - 2 - 3

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: JAN HOURS: 09-11

				пот	10 01.0						MONTH.	OMI I	JOURG.	JJ-11			
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	N I	GE	GE	GE	GE	GE '	GE GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE
	ET	112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
	PT	112	30	80	60	40	40	32	24	20	10	12	10	08	VO	04	00
• • •	••••		• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •
***	CETT	8.5	8.8	10.6	11 =	13.9	14.0	15.0	15.0	18 3	15 3	15.8	16.0	16 1	16 6	100	16.8
МО	CEIL	0.5	0.0	10.0	11.5	13.9	14.0	15.0	15.0	15.3	15.3	15.6	16.0	16.1	16.5	16.6	10.8
-	20000			12.0	12.0	15 3	15 4	16 5	16 6	16.7	16.0	17.4	17 6	17 7	10 1	10.3	10 5
_	18000	9.6	9.8	12.0 12.0	12.9 12.9	15.3 15.3	15.4 15.4	16.5 16.5	16.5 16.5	16.7 16.7	16.9	17.4 17.4	17.6 17.6	17.7 17.7	18.1 18.1	18.3	18.5 18.5
	16000	9.6	9.8 9.8					16.5	16.5		16.9					18.3	
		9.6		12.0	12.9	15.3	15.4			16.7	16.9	17.4	17.6	17.7	18.1	18.3	18.5
	14000	9.6	9.8	12.0	12.9	15.3	15.4	16.5	16.5	16.7	16.9	17.4	17.6	17.7	18.1	18.3	18.5
GE	12000	9.7	10.0	12.1	13.0	15.4	15.5	16.6	16.7	16.9	17.1	17.6	17.9	18.0	18.3	18.5	18.7
~-	10000	10.0							10.4		10.0		•••				aa -
_	10000	10.8	11.0	13.7	14.6	17.1	17.2	18.3	18.4	18.6	18.8	19.4	19.6	19.7	20.0	20.2	20.5
GE	9000	11.3	11.5	14.3	15.4	17.9	18.0	19.0	19.2	19.4	19.6	20.1	20.3	20.5	20.8	21.0	21.2
GE	8000	12.2	12.6	15.4	16.5	19.3	19.9	21.0	21.2	21.4	21.8	22.3	22.5	22.6	22.9	23.2	23.4
GE	7000	12.3	12.7	16.1	17.2	20.0	20.7	21.8	22.0	22.2	22.6	23.2	23.4	23.5	23.8	24.0	24.2
GE	6000	12.4	12.8	16.2	17.3	20.1	20.8	21.9	22.1	22.3	22.7	23.3	23.5	23.6	23.9	24.1	24.4
GE	5000	12.9	13.2	16.8	17.9	20.7	21.3	22.4	22.6	22.9	23.5	24.0	24.2	24.4	24.7	24.9	25.1
GE	4500	13.5	13.9	17.5	18.6	21.4	22.1	23.3	23.5	23.9	24.7	25.2	25.4	25.5	25.9	26.1	26.3
GE	4000	14.4	14.7	18.5	19.7	22.8	23.6	24.9	25.2	25.6	26.5	27.1	27.3	27.4	27.7	27.9	28.1
GE	3500	16.1	16.6	20.7	21.9	25.0	25.8	27.2	27.6	28.2	29.2	29.8	30.0	30.2	30.5	30.7	31.0
GE	3000	17.1	17.5	22.7	24.1	27.4	28.1	29.7	30.1	30.8	31.8	32.4	32.6	32.8	33.1	33.3	33.5
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GE	2500	18.8	19.3	24.9	26.3	29.7	30.4	32.0	32.7	33.4	34.5	35.1	35.3	35.5	35.8	36.0	36.3
GE	2000	22.5	23.6	29.8	31.2	34.8	36.0	37.7	38.9	39.6	41.3	42.0	42.2	42.4	42.7	43.0	43.2
GE	1800	23.3	24.5	30.7	32.1	35.8	37.0	38.6	39.8	40.7	42.4	43.1	43.3	43.5	43.8	44.0	44.3
GΕ	1500	27.9	29.4	36.3	38.0	42.2	43.4	45.1	46.6	47.7	49.7	50.4	50.6	50.9	51.2	51.4	51.6
GE	1200	31.5	33.0	40.8	42.5	47.2	48.4	50.2	51.8	52.9	55.0	55.7	56.0	56.2	56.5	56.7	56.9
-	1000	22.4	35.0	44.0	45.0						F0 6	co 4		50 0			
GE	1000	33.4	35.0	44.0	45.8	50.9	52.3	54.3	56.1	57.1	59.6	60.4	60.6	60.8	61.1	61.4	61.6
GE	900	35.2	36.7	46.5	48.4	53.6	55.0	57.1	59.0	60.1	62.6	63.4	63.6	63.9	64.3	64.5	64.7
GE	800	36.1	37.7	47.8	49.8	55.1	56.6	59.3	61.3	62.4	65.2	66.2	66.6	66.8	67.2	67.4	67.6
GE	700	37.2	38.7	49.7	52.2	58.3	60.4	63.5	65.6	66.8	69.7	70.9	71.2	71.5	72.0	72.3	72.5
GE	600	38.0	39.5	50.9	53.4	60.0	62.0	65.3	67.5	68.7	71.6	73.2	73.5	73.8	74.4	74.7	74.9
			40.0														
GE	500	38.6	40.2	52.2	54.7	62.2	64.7	68.2	70.7	72.0	75.0	77.2	77.5	77.9	78.5	78.8	79.0
GE	400	39.0	40.5	52.8	55.4	63.2	65.7	69.6	72.4	74.5	77.9	80.7	81.1	81.5	82.0	82.4	82.6
GE	300	39.0	40.5	53.0	55.8	64.0	66.6	70.7	74.2	76.9	81.0	84.4	85.0	85.4	86.1	86.8	87.1
GE	200	39.0	40.5	53.0	55.8	64.0	66.7	70.8	74.7	77.5	81.6	85.5	86.4	87.1	89.3	90.7	91.7
GE	100	39.0	40.5	53.0	55.8	64.0	66.7	70.8	74.7	77.5	81.6	85.7	86.6	87.6	90.2	93.4	98.6
-		30.5	40.5														400.5
GE	000	39.0	40.5	53.0	55.8	64.0	66.7	70.8	74.7	77.5	81.6	85.7	86.6	87.6	90.2	93.4	100.0
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PERCENTAGE PREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: JAN HOURS: 12-14 VISIBILITY IN METERS CEILING IN GE Œ GE Œ GE GE GE GE GE GR GE GR GE GE GR GE 20 FRET 112 90 80 60 48 40 32 16 12 10 80 06 04 00 NO CEIL 7.6 8.1 11.0 12.0 14.5 14.7 15.5 15.9 16.1 16.6 16.7 16.7 16.8 16.8 16.9 17.2 GE 20000 9.0 9.5 12.4 13.5 16.2 16.5 17.3 17.7 18.0 18.4 18.5 18.5 18.6 18.6 18.7 19.0 18.4 18.5 GR 18000 9.0 9.5 12.4 13.5 16.2 16.5 17.3 17.7 18.0 18.5 18.6 18.6 18.7 19.0 GE 16000 9.0 9.5 12.4 13.5 16.2 16.5 17.3 17.7 18.0 18.4 18.5 18.5 18.6 18.6 18.7 19.0 **GE 14000** 18.2 18.6 9.2 9.7 12.7 13.7 16.5 16.7 18.0 18.7 18.7 18.8 18.8 18.9 17.5 19.3 18.9 19.2 GE 12000 9.2 9.7 12.7 13.7 16.5 16.7 17.5 18.3 18.5 19.0 19.0 19.2 19.3 19.6 17.9 18.2 CTR 10000 10.6 11.1 14.1 15.2 19.0 19.8 20.0 20.5 20.6 20.6 20.7 20.7 20.8 21.1 GR 9000 10.8 11.4 14.6 16.1 19.0 19.4 20.2 21.0 21.2 21.6 21.8 21.8 21.9 22.0 21.9 22.3 GE 8000 12.1 12.7 16.2 18.1 21.2 21.6 23.6 23.8 24.2 24.4 24.4 24.5 24.6 22.8 24.5 24.9 GB 7000 12.7 13.2 16.9 18.7 22.0 22.5 23.7 24.6 24.8 25.2 25.3 25.3 25.4 25.4 25.5 25.9 GR 6000 12.7 13.2 16.9 18.7 22.1 22.6 23.8 24.7 24.9 25.3 25.4 25.4 25.5 25.5 25.6 26.0 GE 5000 12.9 18.9 25.1 25.3 25.8 25.9 25.9 13.4 17.1 22.5 23.1 24.2 26.0 26.0 26.1 GE 4500 13.7 19.3 25.4 25.6 26.1 26.2 26.3 13.2 17.4 22.8 23.4 24.6 26.2 26.3 26.4 26.7 GE 4000 14.1 14.6 18.6 20.6 24.4 24.9 26.2 27.1 27.3 27.7 27.8 27.8 27.9 27.9 28.0 28.4 GE 3500 15.4 16.0 20.1 22.2 26.1 26.7 28.0 28.9 29.1 29.5 29.7 29.7 29.8 29.9 29.8 30.2 GE 3000 18.8 19.8 24.8 26.9 31.1 31.7 33.2 34.1 34.3 34.7 34.8 34.8 35.0 35.0 35.1 35.4 GR 2500 20.7 21.8 26.7 29.1 37.2 37.8 37.9 37.9 33.5 34.2 35.8 36.8 38.0 38.0 38.1 38.4 GB 2000 25.5 26.9 32.3 35.1 39.6 40.4 42.2 43.6 44.4 45.1 45.2 45.2 45.3 45.3 45.5 45.8 Œ 1800 27.3 28.7 34.2 37.0 41.6 42.3 44.2 45.8 46.5 47.3 47.4 47.4 47.5 47.5 47.6 47.9 1500 31.4 42.5 48.7 Œ 33.0 39.7 47.6 50.6 52.4 53.1 54.0 54.2 54.2 54.3 54.3 54.4 54.8 GE 1200 35.0 46.6 55.1 56.9 57.7 58.7 58.9 36.8 43.7 51.9 53.0 58.9 59.0 59.0 59.1 59.4 Œ 1000 38.2 40.2 48.7 51.8 57.9 59.0 61.3 63.2 64.1 65.6 65.8 65.8 65.9 65.9 66.0 66.3 Œ 900 39.1 41.0 50.4 53.6 59.6 60.8 63.1 65.0 65.9 67.6 68.1 68.1 68.2 68.2 68.3 68.6 800 55.1 68.4 70.2 CR 40.0 61.5 67.5 70.9 70.9 71.0 71.1 42.1 51.8 63.1 65.4 71.0 71.4 Œ 700 40.7 42.9 56.8 65.5 70.5 71.6 73.9 74.9 74.9 75.0 53.6 63.5 68.1 75.0 75.1 75.4 600 41.2 77.2 77.5 Œ 67.1 77.2 77.3 43.5 54.7 58.0 65.0 69.9 72.3 73.7 76.1 77.4 77.8 Œ 500 42.0 44.3 56.5 60.5 68.8 71.1 74.5 77.1 78.6 81.2 82.4 82.4 82.6 82.8 82.9 83.2 400 42.1 Œ 60.9 69.8 84.2 86.6 44.4 56.6 81.3 86.0 72.3 76.1 79.3 85.6 86.3 86.5 86.9 Œ 300 42.1 44.5 56.9 61.3 70.3 72.8 76.9 80.4 83.2 86.7 88.4 89.5 89.7 90.4 90.5 90.9 Œ 200 44.5 83.3 87.2 89.0 90.5 42.1 56.9 61.3 70.3 72.8 77.1 80.5 90.8 91.7 92.5 93.6 Œ 100 42.1 44.5 56.9 61.3 70.3 72.8 77.1 80.5. 83.3 87.2 89.2 91.0 91.7 92.9 95.2 99.0 QR 000 42.1 44.5 56.9 61.3 70.3 72.8 77.1 80.5 83.3 87.2 89.2 91.0 91.7 92.9 95.2 100.0

TOTAL NUMBER OF OBSERVATIONS 924

OPERATING LOCATION "A" PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY USAFETAC, ASHEVILLE NC FROM HOUDT, ORGENULATION

STATIO	NUMBER:	106070		TO UTC		NDAHLEM	AB/GRRI	MANY		PERIOD MONTH:	OF REC	ORD: J	AN 80 -	DEC 89		
CEILING	1				•	VISIBIL:	I KI YTI	TETERS								
IN	GE	GE	GE	GE	GE	GE	GE	GE	Œ	GE	Œ	GE	GE	GE	Œ	GE
FEET	112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
• • • • • • •		•••••	•••••	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •		• • • • • • •	• • • • • • •	•••••	• • • • • •
NO CEII	10.4	10.6	13.6	14.4	16.6	17.2	17.6	17.6	18.2	18.7	18.8	18.8	18.8	18.8	18.9	19.0
GE 2000	0 12.1	12.3	15.9	16.7	19.6	20.2	20.8	20.8	21.3	21.9	22.0	22.0	22.0	22.0	22.1	22.2
GE 1800	0 12.3	12.6	16.1	16.9	19.8	20.5	21.0	21.0	21.5	22.1	22.2	22.2	22.2	22.2	22.3	22.4
GE 1600	0 12.3	12.6	16.1	16.9	19.8	20.5	21.0	21.0	21.5	22.1	22.2	22.2	22.2	22.2	22.3	22.4
GE 1400	0 12.4	12.7	16.2	17.0	19.9	20.6	21.1	21.1	21.6	22.2	22.3	22.3	22.3	22.3	22.4	22.5
GE 1200	0 12.9	13.1	16.7	17.4	20.3	21.0	21.5	21.8	22.3	22.8	22.9	22.9	22.9	22.9	23.1	23.2
GE 1000	0 13.4	13.7	17.5	18.4	21.3	22.0	22.5	22.8	23.4	23.9	24.0	24.0	24.0	24.0	24.1	24.2
GE 900		14.0	17.7	18.7	21.6	22.3	22.9	23.3	23.8	24.4	24.5	24.5	24.5	24.5	24.6	24.7
GE 800	4	15.0	19.3	20.2	23.7	24.4	25.0	25.3	25.9	26.4	26.5	26.5	26.5	26.5	26.6	26.7
GE 700	0 15.4	15.7	19.9	20.9	24.4	25.0	25.9	26.2	26.7	27.3	27.4	27.4	27.4	27.4	27.5	27.6
GE 600	0 15.4	15.7	19.9	20.9	24.4	25.0	25.9	26.2	26.7	27.3	27.4	27.4	27.4	27.4	27.5	27.6
GE 500	0 15.7	16.0	20.2	21.2	24.7	25.4	26.5	26.8	27.4	27.9	28.0	28.0	28.0	28.0	28.1	28.2
GB 450		16.6	21.1	22.1	25.5	26.3	27.4	27.7	28.2	28.8	28.9	28.9	28.9	28.9	29.0	29.1
GE 400		17.5	22.1	23.1	26.5	27.3	28.4	28.7	29.2	29.8	29.9	29.9	29.9	29.9	30.0	30.1
GE 350	- [19.9	24.6	25.5	29.0	30.0	31.1	31.4	31.9	32.5	32.6	32.6	32.6	32.6	32.7	32.8
GE 300	0 24.8	25.4	30.5	31.5	35.5	36.6	37.8	38.2	38.7	39.3	39.4	39.4	39.4	39.4	39.5	39.6
GE 250		28.0	34.3	35.6	39.7	40.8	42.2	42.6	43.2	43.7	43.8	43.8	43.8	43.8	43.9	44.0
GE 200	- 1	33.4	40.3	41.9	46.4	47.7	49.2	50.1	50.6	51.2	51.3	51.4	51.4	51.4	51.5	51.6
GE 180		35.6	42.7	44.4	48.9	50.2	51.7	52.6	53.1	53.7	53.8	53.9	53.9	53.9	54.0	54.1
GE 150		40.2	48.6	50.3	55.4	56.7	58.5	59.5	60.2	60.7	60.9	61.0	61.0	61.0	61.1	61.3
GE 120	0 41.2	43.1	52.4	54.3	59.7	61.1	63.1	64.3	65.0	65.6	65.8	65.9	65.9	65.9	66.0	66.1
GE 100	0 43.3	45.1	54.9	57.5	63.9	65.4	67.5	68.7	69.5	70.6	70.9	71.0	71.0	71.0	71.1	71.2
GE 90		46.3	56.1	58.8	65.3	66.8	68.9	70.1	70.9	72.0	72.3	72.4	72.4	72.4	72.5	72.6
GE 80	0 44.7	46.6	56.7	59.6	66.3	67.9	70.0	71.2	72.2	73.3	73.7	73.8	73.8	73.8	73.9	74.0
GE 70	0 45.2	47.2	58.2	61.3	68.0	69.7	72.4	73.8	75.0	76.6	77.7	77.8	77.8	77.9	78.0	78.1
GE 60	0 45.6	47.7	59.5	62.8	69.6	71.3	74.1	75.6	76.8	78.5	79.8	79.9	80.1	80.2	80.3	80.4
GE 50	0 46.3	48.5	60.9	65.0	72.6	75.1	78.2	80.0	81.3	83.0	84.8	85.1	85.3	85.4	85.5	85.6
GE 40		48.8	61.6	65.7	73.8	76.4	79.7	81.5	83.4	85.7	88.1	88.3	88.7	88.9	89.0	89.1
GE 30		48.6	61.6	65.7	73.8	76.5	80.2	82.0	84.2	86.7	89.4	89.6	90.2	90.5	90.6	90.7
GE 20		48.8	61.6	65.7	73.8	76.7	80.7	82.9	85.3	89.2	92.0	92.4	93.5	95.1	95.9	96.1
GE 10	1	48.8	61.6	65.7	73.8	76.7	80.7	82.9	85.3	89.2	92.1	92.5	93.8	95.8	97.6	99.7
•						• •										
GE 00	0 46.5	48.8	61.6	65.7	73.8	76.7	80.7	82.9	85.3	89.2	92.1	92.5	93.8	95.8	97.6	100.0

TOTAL NUMBER OF OBSERVATIONS 924

D - 2 - 6

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM BOURLY OBSERVATIONS

STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 STATION NUMBER: 106070 MONTH: JAN HOURS: 18-20 LST TO UTC: - 1 CRILING VISIBILITY IN METERS GK. GR GR GR 710 GR **GR** GR CIR GR. GR GE GR CR Œ GR Œ FEET 112 90 80 60 48 40 32 24 20 16 12 10 80 06 04 00 NO CRIL 14.8 15.3 18.5 19.4 21.2 21.6 22.4 22.4 22.7 23.5 23.6 23.7 23.7 23.9 23.9 23.9 GE 20000 16.3 16.8 20.0 21.0 23.1 23.4 24.5 24.5 24.7 25.6 25.7 25.8 25.8 25.9 25.9 25.9 GE 18000 16.3 16.8 20.0 21.0 23.1 23.4 24.5 24.7 25.6 25.7 25.8 25.8 25.9 25.9 25.9 24.5 GR 16000 16.3 16.8 20.0 21.0 23.1 23.4 24.5 24.5 24.7 25.6 25.7 25.8 25.8 25.9 25.9 25.9 GE 14000 24.6 25.7 25.9 25.9 16.3 16.8 20.2 21.1 23.2 23.5 24.6 24.8 25.8 26.0 26.0 GR 12000 16.3 16.8 20.2 21.1 24.6 24.6 25.7 25.8 25.9 25.9 26.0 26.0 23.2 23.5 24.8 26.0 **GE 10000** 16.8 17.2 20.6 21.7 23.7 24.3 25.4 25.4 25.6 26.5 26.6 26.7 26.7 26.8 26.8 26.8 GE 9000 17.2 17.6 21.2 22.5 24.7 25.3 26.5 26.5 26.7 27.6 27.7 27.8 27.8 27.9 27.9 27.9 GR 8000 18.5 19.1 22.7 24.2 26.4 26.9 28.1 28.1 28.3 29.2 29.3 29.4 29.4 29.5 29.5 20.5 7000 29.5 29.7 GE 18.6 19.2 22.8 24.3 26.5 27.0 28.4 28.4 28.6 29.6 29.7 29.8 29.8 29.8 Œ 6000 18.8 19.4 23.0 24.5 26.8 27.3 28.8 28.8 29.0 29.8 30.0 30.1 30.1 30.2 30.2 30.2 CIR 5000 19.0 19.5 23.2 24.7 27.0 27.6 29.0 29.0 29.2 30.1 30.2 30.3 30.3 30.4 30.4 30.4 Œ 4500 19.2 19.7 23.4 24.9 27.2 27.9 29.3 29.3 29.5 30.4 30.5 30.6 30.6 30.7 30.7 30.7 4000 20.2 20.7 24.7 26.3 28.5 30.7 30.7 30.9 31.8 31.9 32.0 32.0 32.1 Œ 29.2 32.1 32.1 GE 3500 23.6 24.2 28.2 29.7 32.0 32.8 34.3 34.3 34.5 35.4 35.5 35.6 35.6 35.7 35.7 35.7 Œ 3000 28.3 28.9 33.7 37.6 40.0 40.1 40.3 41.2 41.4 41.4 41.5 35.2 38.3 41.3 41.5 41.5 Œ 2500 30.7 31.6 36.8 38.6 41.0 41.7 43.7 43.9 44.2 45.1 45.2 45.3 45.3 45.4 45.4 45.4 **GR** 2000 36.3 37.3 43.2 45.2 47.7 52.2 52.4 52.5 52.5 48.5 50.4 50.8 51.2 52.3 52.4 52.5 Œ 1800 36.9 37.9 44.4 46.6 49.5 50.2 52.2 52.6 53.1 54.1 54.4 54.5 54.5 54.6 54.6 54.6 Œ 1500 40.7 41.9 49.7 52.0 55.4 56.3 58.6 59.3 59.7 60.8 61.2 61.3 61.3 61.4 61.4 61.4 Œ 1200 42.8 44.2 52.4 54.8 58.5 59.5 62.0 63.0 63.4 64.7 65.3 65.4 65.4 65.5 65.5 65.5 Œ 69.8 1000 44.8 46.2 55.4 58.3 62.7 63.8 66.6 67.5 68.1 70.5 70.6 70.6 70.7 70.7 70.7 Œ 900 45.3 46.7 56.6 59.6 64.5 65.6 68.3 69.3 69.8 71.6 72.2 72.3 72.3 72.4 72.4 72.4 Œ 800 45.8 47.3 57.2 60.1 65.0 66.1 69.0 69.9 70.5 72.3 73.0 73.3 73.3 73.4 73.4 73.4 78.1 Œ 700 48.1 60.2 63.3 78.0 49.R 68.7 69.9 73.0 74.1 74.6 76.7 77.6 78.0 78.1 78.1 Œ 600 49.1 50.9 61.7 64.7 70.6 71.8 75.4 76.6 77.1 79.4 80.6 81.0 81.2 81.4 81.4 81.4 Œ 500 49.7 51.4 62.5 65.7 72.0 73.4 77.8 79.1 79.7 82.0 83.7 84.1 84.2 84.4 84.4 Œ 400 50.3 63.6 67.0 81.9 83.0 85.8 87.6 88.2 88.3 88.6 88.6 52.1 74.2 75.6 80.6 88.6 CE 300 50.3 52.1 63.6 67.1 74.5 76.0 81.8 83.3 84.4 87.3 89.4 90.4 91.0 91.3 91.3 91.3 200 Œ 50.3 52.1 63.7 67.2 74.7 76.3 82.1 83.7 85.0 87.9 90.2 91.5 92.6 93.9 94.6 94.9 Œ 100 50.4 52.2 63.8 74.8 88.2 67.3 76.4 82.4 83.9 85.2 90.8 92.2 93.5 95.2 97.4 99.7 000 50.4 52.2 63.8 67.3 74.8 75.4 82.4 83.9 85.2 88.2 90.8 92.2 93.6 95.2 97.4 100.0 Œ

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 STATION NUMBER: 106070 LST TO UTC: - 1 MONTH: JAN HOURS: 21-23 CRILING VISIBILITY IN METERS ge gr GR IN Œ CR CIR. GR GR GR GR æ GE QR. αĸ GR GE FEET 112 90 80 60 48 40 32 24 20 16 12 10 80 06 04 00 NO CEIL 14.4 15.1 17.4 18.6 19.9 20.4 21.1 22.3 22.3 22.8 23.1 23.1 23.2 23.2 23.3 23.4 GE 20000 15.3 16.0 18.4 19.6 21.0 21.5 22.2 23.5 23.5 24.0 24.3 24.3 24.4 24.4 24.5 24.6 GE 18000 15.3 18.4 22.2 23.5 24.0 24.3 24.3 24.4 19.6 23.5 24.4 24.5 24.6 16.0 21.0 21.5 GE 16000 15.3 16.0 18.4 19.6 21.0 21.5 22.2 23.5 23.5 24.0 24.3 24.3 24.4 24.4 24.5 24.6 GE 14000 15.3 16.0 18.4 19.6 21.0 21.5 22.2 23.5 23.5 24.0 24.3 24.3 24.4 24.4 24.5 24.6 GE 12000 15.5 22.4 23.7 24.5 24.5 24.6 24.6 24.7 16.2 18.6 19.8 21.2 21.7 23.7 24.2 24.8 GE 10000 15.5 19.0 20.2 23.2 24.5 24.5 24.9 25.3 25.3 25.4 25.4 25.5 25.6 16.2 22.0 22.4 GE 9000 16.2 17.0 20.2 21.5 23.3 23.7 24.5 25.8 25.8 26.3 26.6 26.6 26.7 26.7 26.8 26.9 GE 8000 17.8 18.5 21.9 23.3 25.3 25.7 26.7 28.0 28.0 28.4 28.8 28.8 28.9 28.9 29.0 29.1 7000 27.0 28.3 28.3 28.8 29.1 29.1 29.2 29.2 29.3 GE 18.1 18.8 22.2 23.6 25.6 26.0 29.4 GB 6000 18.2 19.0 22.3 23.7 25.7 26.1 27.2 28.5 28.5 29.0 29.3 29.3 29.4 29.4 29.5 29.6 GE 5000 18.8 19.7 23.1 24.5 26.5 26.9 28.0 29.3 29.3 29.7 30.1 30.1 30.2 30.2 30.3 30.4 GE 4500 19.6 20.5 24.1 25.5 27.5 27.9 29.0 30.3 30.3 30.7 31.0 31.0 31.2 31.2 31.3 31.4 32.2 4000 30.1 GE 20.5 21.4 25.1 26.5 28.5 29.0 31.4 31.4 31.8 32.1 32.1 32.2 32.4 32.5 GE 3500 22.7 23.5 27.6 29.1 31.2 31.6 32.7 34.0 34.0 34.4 34.7 34.7 34.9 34.9 35.0 35.1 3000 38.7 39.7 GE 26.6 27.7 31.9 33.4 37.4 38.7 39.1 39.4 39.4 39.5 39.5 35.6 36.2 39.8 GE 2500 29.2 30.4 36.2 38.5 39.0 40.2 41.5 41.5 41.9 42.3 42.3 42.4 42.4 42.5 34.6 42.6 2000 GR 34.2 35.6 42.7 42.6 45.4 46.0 47.3 AR. 9 48.9 49.5 50.1 50.1 50.2 50.2 50.3 50.4 GE 1800 35.2 36.6 42.2 44.2 47.1 47.6 48.9 50.5 50.5 51.1 51.7 51.7 51.9 51.9 52.0 52.1 GE 1500 39.4 46.8 49.2 52.3 54.2 56.0 56.3 57.7 57.7 41.1 52.8 56.9 57.8 57.8 58.0 58.1 **GR** 1200 42.9 44.6 51.0 53.4 56.4 57.3 58.7 60.5 60.8 61.7 62.5 62.5 62.6 62.6 62.7 62.9 57.3 67.5 67.8 67.9 67.9 GE. 1000 47.9 54.8 60.7 66.7 46.1 61.5 63.0 64.R 65.4 68.0 68.1 GΒ 900 47.1 48.9 56.6 59.2 62.9 63.7 65.1 67.0 67.5 68.8 69.7 69.9 70.0 70.0 70.2 70.3 47.9 GE 800 57.7 68.4 69.1 49.9 60.2 64.1 64.9 66.4 70.4 71.2 71.5 71.6 71.6 71.7 71.8 75.9 Œ 700 50.2 52.2 60.8 63.5 67.8 68.6 70.3 72.2 72.9 74.3 75.4 75.6 75.7 75.7 75.8 GE 600 50.8 52.7 61.7 64.8 69.3 70.2 72.1 74.3 74.9 76.4 77.6 78.1 78.2 78.2 78.3 78.4 500 62.7 75.2 77.5 GE 51.3 53.3 66.2 71.6 72.8 78.3 80.2 82.1 82.7 82.8 82.9 83.0 83.1 GE 400 63.9 67.5 78.5 80.9 82.1 84.6 86.7 87.4 87.6 52.1 54.0 73.9 75.3 87.3 87.7 87.8 GR 300 52.1 54.0 64.1 67.6 74.2 75.6 79.2 81.8 83.2 85.9 88.5 89.9 90.2 90.7 90.8 91.0 GR 200 52.1 54.0 64.1 67.6 74.4 75.8 79.6 82.7 84.4 87.3 90.0 91.6 91.9 92.9 93.9 94.2 GR 100 52.1 54.0 64.1 67.6 74.4 75.8 79.6 82.7 84.4 87.5 90.5 92.3 92.7 93.9 96.1 99.8 000 52.1 54.0 64.1 67.6 74.4 75.8 79.6 82.7 84.4 87.5 90.5 92.3 92.7 93.9 96.1 100.0 GE

TOTAL NUMBER OF OBSERVATIONS 918

D - 2 - 8

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDARLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: JAN HOURS: ALL VISIBILITY IN METERS CRILING GE IN QR Œ GR CR GR GE GE GR Œ GR CR GR Œ GR æ PRET 112 90 80 50 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 11.4 11.8 14.5 15.5 17.2 17.7 18.4 18.8 19.0 19.6 19.9 20.0 20.1 20.3 20.5 20.7 GR 20000 12.6 13.0 15.9 16.9 18.8 19.3 20.1 20.5 20.8 21.3 21.6 21.8 21.9 22.1 22.3 22.4 **GR 18000** 20.1 20.6 12.6 13.1 16.0 16.9 18.8 19.3 20.8 21.6 21.8 21.9 22.1 21.3 22.3 22.4 GR 16000 12.6 13.1 16.0 16.9 18.8 19.3 20.1 20.6 20.8 21.3 21.6 21.8 21.9 22.1 22.3 22.4 GR 14000 12.7 13.1 16.0 17.0 18.9 19.4 20.1 20.6 20.8 21.4 21.7 21.9 22.0 22.2 22.3 22.5 GR 12000 12.8 13.2 16.1 17.1 19.0 19.5 20.3 20.8 21.0 21.6 21.9 22.0 22.1 22.3 22.5 GR 10000 13.4 13.8 16.9 17.9 19.8 20.4 21.2 21.7 22.0 22.8 22.5 23.0 23.1 23.3 23.5 23.6 GR 9000 13.8 14.2 17.5 18.7 20.6 21.2 22.0 22.6 22.8 23.3 23.6 23.8 23.9 24.1 24.3 Œ 8000 15.0 15.5 18.9 20.1 22.4 23.0 23.9 24.5 24.7 25.3 25.6 25.8 25.9 26.1 26.3 26.4 7000 GR 15.2 15.7 19.3 20.5 22.7 23.4 24.3 24.9 25.2 25.8 26.1 26.3 26.4 26.6 26.8 26.9 Œ 6000 15.3 15.8 19.4 20.7 22.9 23.6 24.5 25.2 25.4 26.0 26.3 26.5 26.6 26.8 27.0 27.1 GE 5000 15.6 16.1 19.7 21.0 23.3 24.0 24.9 25.5 25.8 26.4 26.7 26.9 27.0 27.2 27.4 27.5 GR 4500 16.3 16.8 20.6 21.8 24.2 24.9 25.8 26.5 26.7 27.4 27.7 27.9 28.0 28.2 28.4 28.6 4000 22.9 26.0 27.1 28.0 GE 17.1 17.6 21.6 25.3 27.7 28.7 29.0 29.2 29.3 29.5 29.7 29.9 Œ 3500 19.1 19.7 23.9 25.2 27.6 28.4 29.5 30.1 30.4 31.1 31.4 31.6 31.8 32.0 32.1 32.3 Œ 3000 22.4 23.1 27.7 31.8 29.1 32.6 33.8 34.5 34.8 36.4 35.5 35.9 36.1 36.2 36.6 36.7 Œ 2500 24.1 25.0 30.0 31.5 34.2 35.0 36.3 37.1 37.5 38.2 38.6 38.8 38.9 39.1 39.3 39.4 **CIR** 2000 28.7 29.7 35.3 39.9 37.0 40.9 42.3 43.4 43.8 44.7 45.1 45.3 45.5 45.7 45.R 46.0 Œ 1800 30.0 31.1 37.0 38.8 41.8 42.8 44.3 45.5 46.0 46.9 47.3 47.5 47.7 47.9 48.0 48.2 Œ 1500 34.1 35.4 42.0 43.9 47.6 48.8 50.4 51.8 53.9 52.4 53.4 54.1 54.2 54.5 54.7 54.8 Œ 1200 37.5 38.9 46.0 48.1 51.9 53.2 55.0 56.5 57.1 58.3 58.8 59.1 59.2 59.4 59.6 59.8 Œ 1000 40.4 41.9 49.8 56.4 57.9 52.0 59.8 61.4 62.0 63.6 64.2 64.4 64.5 64.8 65.0 65.1 66.8 Œ 900 41.4 42.9 51.2 53.6 58.2 59.6 61.5 63.2 63.9 65.5 66.1 66.4 66.5 67.0 67.1 GR. 800 42.4 43.9 52.5 54.9 59.6 61.1 63.2 64.9 65.7 68.2 67.4 68.5 68.6 68.9 69.1 69.2 Œ 700 44.1 45.7 57.7 55.0 62.8 64.6 67.0 68.8 69.7 71.6 72.7 73.0 73.2 73.4 73.6 73.8 Œ 600 44.8 46.5 56.4 59.2 64.6 66.4 69.1 71.0 72.0 73.9 75.2 75.6 75.8 76.1 76.3 76.4 Œ 500 45.6 47.3 58.0 61.2 67.4 69.6 72.6 74.8 75.9 78.1 79.8 80.2 80.4 80.7 80.9 Œ 400 46.1 47.8 58.9 62.1 69.1 71.4 75.0 77.4 78.9 81.4 83.4 83.8 84.5 84.1 84.7 84.8 59.1 CR 300 46.2 47.9 62.4 69.6 72.0 76.0 78.7 80.5 83.4 85.8 86.6 87.0 87.5 87.8 88.0 Œ 200 46.2 47.9 59.1 62.5 69.8 72.3 76.5 79.4 81.4 84.6 87.4 88.5 89.3 90.7 91.7 92.2 Œ 100 46.2 47.9 59.1 62.5 69.B 72.4 76.6 79.5 81.6 84.8 87.9 89.3 90.4 92.4 95.3 99.3 Œ 000 46.2 47.9 59.1 62.5 69.8 72.4 76.6 79.5 81.6 84.8 87.9 89.3 90.4 92.4 95.3 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: FEB HOURS: 00-02 CEILING VISIBILITY IN METERS Œ GE GE GE GE GE GE IN GR GR GE Œ GE Œ GE Œ GE FRET 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 24.6 25.3 31.8 33.1 36.0 36.7 37.8 37.8 37.8 37.8 37.9 37.9 38.0 38.2 38.3 38.3 GE 20000 27.1 27.8 35.3 36.7 39.9 40.6 41.8 42.0 42.0 42.2 42.3 42.3 42.4 42.5 42.6 42.6 GE 18000 27.2 27.9 35.5 36.9 40.0 40.8 41.9 42.2 42.2 42.3 42.4 42.4 42.5 42.6 42.8 42.8 GE 16000 27.2 27.9 35.5 40.0 40.8 42.2 42.3 42.4 42.5 42.6 42.8 36.9 41.9 42.2 42.4 42.8 GE 14000 27.2 27.9 35.5 36.9 40.0 40.8 41.9 42.2 42.2 42.3 42.4 42.4 42.5 42.6 42.8 42.8 GE 12000 27.2 27.9 35.5 36.9 40.0 40.8 41.9 42.2 42.2 42.3 42.4 42.4 42.5 42.6 42.8 42.8 GB 10000 37.5 40.6 42.5 27.8 28.5 36.0 41.3 42.8 42.8 42.9 43.0 43.0 43.1 43.2 GE 9000 41.8 28.5 29.3 37.1 38.6 42.5 43.7 43.9 43.9 44.1 44.2 44.2 44.3 44.4 44.6 44.6 GE 8000 29.3 30.2 38.0 39.6 42.9 43.6 44.8 45.3 45.3 45.5 45.6 45.6 45.7 45.8 46.1 46.1 GE 7000 45.9 29.8 30.6 38.8 40.3 43.9 44.8 46.5 46.5 46.6 46.8 46.8 46.9 47.0 47.2 47.2 GR 6000 45.0 46.2 46.9 47.0 47.1 30.0 30.9 39.0 40.5 44.2 46.8 46.8 47.0 47.2 47.5 47.5 GE 5000 46.8 47.3 47.3 47.5 47.6 47.6 47.7 47.8 30.4 31.2 39.6 44.8 45.6 48.1 48.1 41.1 4500 46.5 47.9 48.6 48.8 AR. Q GR 31.1 32.0 40.4 41.9 45.7 49.5 48.5 AR.R 49.0 49.2 49.2 4000 32.4 47.3 48.2 49.6 50.2 50.2 50.3 50.4 50.4 50.5 50.9 GE 33.5 41.9 43.5 50.6 50.9 53.1 GE 3500 50.5 52.1 52.7 52.8 53.0 33.7 34.7 43.9 49.7 52.7 52.9 52.9 53.4 53.4 45.5 GE 3000 35.9 37.0 46.6 48.3 52.5 53.6 55.6 56.4 56.4 56.5 56.7 56.7 56.8 56.9 57.1 57.1 57.8 GR 2500 37.0 38.2 48.2 49.8 54.2 55.2 58.8 58.8 58.9 59.0 59.0 59.1 59.2 59.5 59.5 62.5 63.7 GE 2000 39.7 41.0 52.7 54.3 58.9 60.0 63.6 63.6 63.8 63.8 64.0 64.1 64.3 64.3 1800 64.4 66.1 66.3 GE 41.0 42.5 54.3 55.9 60.8 61.8 66.0 66.0 66.2 66.2 66.4 66.7 66.7 GE 1500 43.0 44.6 57.0 58.8 63.7 64.8 67.5 69.0 69.3 69.4 69.5 69.5 69.6 69.7 70.0 70.0 GE 1200 44.3 45.9 59.5 61.5 66.8 68.2 70.9 72.8 73.1 73.5 73.6 73.6 73.7 73.9 74.1 74.1 GE 1000 45.6 47.2 61.4 63.5 69.6 71.0 74.0 76.0 76.8 77.3 77.5 77.5 77.6 77.7 78.0 78.0 900 48.5 75.7 78.8 79.3 79.5 79.5 79.6 79.7 80.0 GE 46.8 62.8 65.0 71.3 72.8 77.9 80.0 GE ROOL 47.5 49.2 63.8 66.2 73.0 74.6 77.5 79.6 80.6 81.0 81.4 81.4 81.5 81.6 81.9 81.9 GE 700 48.6 50.4 65.3 67.7 74.8 76.3 79.3 81.6 82.8 83.3 83.6 83.6 83.7 83.9 84.1 84.1 84.2 84.7 600 GR 48.8 50.5 66.2 68.7 75.9 77.4 80.3 83.0 85.4 85.4 85.5 85.6 85.9 85.9 GE 500 49.1 50.9 67.0 69.6 77.3 78.9 82.6 87.0 87.9 87.9 88.0 88.3 85.4 86.6 88.1 88.3 GR 4001 49.4 51.1 67.4 70.1 78.1 79.7 84.0 87.0 88.5 89.2 90.3 90.3 90.5 90.8 91.0 91.0 GR 300 49.5 51.2 67.6 70.4 78.6 80.2 84.6 87.6 89.2 89.9 91.3 91.5 91.8 92.1 92.3 92.3 GE 200 49.5 51.2 70.7 78.8 84.9 67.7 60.4 88.5 90.0 90.8 93.2 93.6 94.3 94.9 95.3 92.7 GE 100 49.5 51.2 67.7 70.7 78.8 80.4 85.0 88.8 90.3 91.3 93.2 93.9 94.5 95.2 96.1 99.6 GR 000 49.5 51.2 67.7 70.7 78.8 80.4 85.0 88.8 90.3 91.3 93.2 93.9 94.5 95.2 96.1 100.0 ******

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: FEB HOURS: 03-05 VISIBILITY IN METERS CRILING Œ GΞ Œ GE GE GE GE GR GE IN GE Œ GE GE GR GE GR FEET 112 90 80 60 48 40 32 24 26 16 12 10 80 06 04 00 NO CEIL 17.7 18.3 26.3 27.6 30.9 31.0 33.0 33.6 33.6 33.6 33.6 33.6 33.6 33.7 33.8 GE 20000 19.9 20.5 30.2 31.6 34.9 35.1 37.1 37.9 37.9 38.0 38.0 38.0 38.0 38.2 38.3 38.8 GE 18000 20.1 20.7 30.4 31.8 35.1 35.3 37.3 38.2 38.2 38.3 38.3 38.3 38.3 38.4 38.5 39.0 **GE 16000** 20.1 20.7 30.4 31.8 35.1 35.3 37.3 38.2 38.2 38.3 38.3 38.3 38.3 38.4 38.5 39.0 37.3 GB 14000 20.1 20.7 30.4 31.8 35.1 35.3 38.2 38.2 38.3 38.3 38.3 38.3 38.4 38.5 39.0 38.3 38.3 GR 12000 20.8 30.5 31.9 37.5 38.4 38.4 38.4 39.1 20.3 35.2 35.5 38.4 38.5 38.6 GE 10000 21.6 22.3 32.0 33.5 36.7 37.0 39.1 39.9 39.9 40.2 40.2 40.2 40.2 40.3 39.5 40.5 GTR 9000 40.3 40.3 40.5 40.5 40.5 21.7 22.4 32.4 33.8 37.1 37.3 40.6 40.8 41.2 Œ 8000 22.5 23.2 33.2 34.6 37.9 38.2 40.3 41.1 41.1 41.7 41.7 41.7 41.7 41.8 41.9 42.4 7000 33.6 35.0 41.0 41.8 42.4 Œ 22.9 23.6 38.6 38.9 41.8 42.4 42.4 42.4 42.5 42.6 43.1 Œ 6000 23.0 23.7 33.7 35.1 38.8 39.0 41.1 41.9 41.9 42.5 42.5 42.5 42.5 42.6 42.8 43.2 23.3 42.3 GR 5000 24.0 34.0 35.5 39.1 39.3 41.5 42.3 42.9 42.9 42.9 42.9 43.0 43.1 43.6 4500 Œ 23.7 24.4 34.4 35.8 39.5 39.7 41.8 42.6 42.6 43.2 43.2 43.2 43.2 43.3 43.5 43.9 Œ 4000 25.7 26.5 36.9 38.3 41.9 44.3 45.1 45.1 45.7 45.7 45.7 45.7 45.8 45.9 42.2 46.4 Œ 3500 27.8 28.6 39.5 40.9 44.8 45.0 47.6 48.4 48.4 49.0 49.0 49.0 49.0 49.1 49.2 49.7 Œ 3000 30.5 41.6 43.2 47.2 47.5 50.3 51.2 51.5 52.2 52.2 52.2 52.3 52.4 Œ 2500 30.2 31.1 42.6 44.3 48.6 48.9 51.8 52.8 53.0 53.7 53.8 53.8 53.8 53.9 54.1 Œ 2000 34.2 35.2 48.4 50.2 54.9 55.1 58.2 59.1 59.4 60.1 60.2 60.2 60.2 60.3 60.4 60.9 1800 35.8 50.2 60.1 62.4 63.3 36.9 51.9 61.7 62.5 62.5 62.5 62.7 GR. 56.7 57.0 61.4 62.8 Œ 1500 38.5 39.6 54.4 56.2 61.5 62.0 65.0 66.8 67.5 68.2 68.4 68.4 68.4 68.6 68.7 69.1 Œ 1200 41.2 42.4 58.1 59.8 68.7 71.7 72.4 72.7 72.7 72.7 65.1 65.6 70.8 72.8 72.9 73.4 GR 1000 43.2 44.4 61.1 63.3 69.4 70.0 73.1 75.6 76.7 77.5 77.7 77.7 77.7 77.9 78.0 78.4 74.7 Œ 900 45.6 62.4 64.5 70.9 77.3 78.3 79.2 79.4 79.4 79.5 44.4 71.5 79.4 79.6 80.2 Œ 800 44.6 45.8 62.7 65.0 71.7 72.6 75.7 78.3 79.4 80.6 80.9 80.9 80.9 81.0 81.2 81.7 Œ 700 63.1 76.7 45.0 46.3 65.6 72.6 73.5 79.3 80.4 81.6 82.1 82.1 82.1 82.2 82.3 82.9 83.5 Œ 600 45.7 47.0 64.2 66.7 73.6 74.6 78.0 80.7 81.9 83.0 83.5 83.5 83.6 83.7 84.3 Œ 500 47.6 67.7 86.5 46.3 65.1 75.4 76.3 80.2 83.3 84.6 85.9 86.6 86.6 86.7 86.8 87.4 89.5 Œ 400 46.4 47.7 65.4 68.1 76.3 77.3 81.5 84.7 86.3 87.8 88.5 88.6 88.7 88.8 88.9 Œ 300 46.6 47.9 65.8 68.6 77.1 90.6 90.7 78.2 82.6 85.9 87.8 89.4 91.0 91.3 91.4 92.0 200 GR 46.6 47.9 65.8 68.6 77.1 78.2 82.6 86.1 88.2 89.9 91.4 91.8 92.2 92.5 93.3 94.1 Œ 100 46.6 47.9 65.8 68.6 77.3 78.3 82.7 86.2 88.5 90.5 92.1 92.5 92.9 93.3 94.2 99.6 CE 000 46.6 47.9 65.8 68.6 77.3 78.3 82.7 86.2 88.5 90.5 92.1 92.5 92.9 93.3 94.2 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 MONTH: FEB HOURS: 06-08 LST TO UTC: - 1 VISIBILITY IN METERS CEILING GE GE GE TN GE GR GR GR GR GE GE GE GR GE GE GE GR FRET 112 90 80 60 48 40 32 24 20 16 12 10 80 06 04 00 NO CEIL 15.4 15.7 21.8 23.1 26.1 27.3 28.7 30.7 31.2 31.2 31.9 32.0 32.0 32.0 32.6 32.6 GE 20000 16.1 16.4 23.1 24.6 27.9 29.3 31.0 33.0 33.8 33.8 34.5 34.6 34.6 34.6 35.2 35.3 16.4 28.3 31.3 33.3 34.2 34.2 34.9 35.0 35.0 35.0 35.6 35.7 GE 18000 16.6 23.3 24.9 29.7 GE 16000 16.4 16.6 23.3 24.9 28.3 29.7 31.3 33.3 34.2 34.2 34.9 35.0 35.0 35.0 35.6 35.7 GE 14000 16.4 16.6 23.3 24.9 28.3 29.7 31.3 33.3 34.2 34.2 34.9 35.0 35.0 35.0 35.6 35.7 GE 12000 16.6 23.6 25.1 35.2 16.8 28.5 31.6 33.6 34.4 34.4 35.1 35.2 35.2 35.8 35.9 29.9 GE 10000 17.8 18.1 25.3 26.9 30.4 31.9 33.6 35.6 36.4 36.4 37.1 37.2 37.2 GR 9000 27.6 36.3 37.1 37.1 18.4 18.8 26.0 31.1 32.6 34.3 37.8 37.9 37.9 37.9 38.5 38.6 Œ 8000 19.1 19.6 27.3 28.9 32.5 34.0 35.8 37.9 38.8 38.8 39.5 39.6 39.6 39.6 40.2 40.3 GR 7000 19.8 27.7 29.2 36.5 38.6 39.5 39.5 40.2 40.3 40.3 40.3 19.3 33.2 34.7 40.9 41.0 40.4 GE 6000 19.3 19.8 27.8 29.3 33.3 34.9 36.6 38.8 39.6 39.6 40.3 40.4 40.4 41.0 41.1 GR 5000 20.0 37.5 20.5 28.5 30.0 34.0 35.6 39.6 40.4 40.4 41.1 41.2 41.2 41.2 41.8 41.9 GE 4500 20.3 20.7 28.7 30.4 34.4 35.9 37.8 39.9 40.8 40.8 41.5 41.6 41.6 41.6 42.2 42.3 GE 4000 21.0 21.4 31.8 35.8 39.3 41.5 42.3 42.3 43.0 30.2 37.5 43.1 43.1 43.1 43.7 43.8 GE 3500 23.7 24.1 33.5 35.2 39.9 41.6 43.5 45.6 46.4 46.4 47.1 47.2 47.2 47.2 47.8 47.9 GE 3000 25.7 26.3 35.9 37.8 42.6 46.4 48.6 49.5 49.5 50.3 50.4 50.4 44.5 50.4 51.0 51.1 GE 2500 26.7 27.3 37.1 39.0 43.8 45.7 47.8 50.1 51.0 51.1 51.9 52.1 52.1 52.1 52.7 52.8 GE 2000 31.3 32.2 42.6 44.9 50.1 52.3 54.7 56.9 57.8 58.3 59.1 59.2 59.2 59.2 59.8 60.0 1800 58.9 60.3 GE 32.7 33.6 44.2 46.5 51.9 54.3 56.7 59.8 61.1 61.2 61.2 61.2 61.8 62.0 GΕ 1500 36.0 36.9 48.5 51.0 56.7 59.4 61.8 64.4 65.7 66.4 67.3 67.4 67.4 67.4 68.0 68.1 1200 37.9 GE 38.8 51.6 54.3 60.3 63.5 66.3 69.3 70.6 71.4 72.4 72.6 72.6 72.6 73.1 73.3 GR 1000 39.7 40.5 53.6 56.3 63.0 66.2 69.3 72.3 74.1 75.3 76.4 76.6 76.6 76.6 77.1 77.3 57.2 64.0 GE 900 40.3 67.1 70.2 73.3 75.0 76.2 77.4 77.6 77.6 41.1 54.3 77.6 78.2 78.3 GE 800 40.9 41.8 55.2 58.5 65.7 68.9 72.1 75.1 76.9 78.1 79.3 79.5 79.5 79.5 80.1 80.2 GE 700 79.4 41.1 42.0 55.7 59.0 66.2 69.5 73.0 76.1 78.2 80.6 80.8 80.8 80.8 81.4 81.5 GE 600 41.7 42.6 56.3 59.6 66.9 70.2 73.7 76.9 79.2 80.3 81.7 82.0 82.0 82.0 82.6 82.7 GE 500 42.4 43.5 57.7 61.1 77.3 80.4 84.5 69.6 73.3 83.0 86.0 86.2 86.5 86.5 87.0 87.2 GE 400 42.8 43.8 58.4 61.8 70.4 74.2 78.3 81.6 84.3 85.9 87.5 87.9 88.2 88.2 88.8 88.9 GE 300 43.0 44.1 62.1 70.7 74.4 78.7 82.0 86.7 88.7 89.5 58.7 84.8 89.2 89.8 90.3 90.5 43.0 GR 200 44.1 58.7 62.1 70.9 74.7 78.9 82.2 85.2 87.2 89.4 90.2 90.8 91.2 92.1 92.9 CE 100 43.0 44.1 58.7 62.1 70.9 74.7 78.9 82.2 85.3 87.3 89.6 90.6 91.4 92.2 94.1 99.5 GE 000 43.0 44.1 58.7 62.1 70.9 74.7 78.9 82.2 85.3 87.3 89.6 90.6 91.5 92.3 94.2 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: FEB HOURS: 09-11 CEILING VISIBILITY IN METERS IN GR GR Œ GE GE GE GE GE Œ GE Œ GE GE GR CIR. GR 112 90 FEET 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 13.9 14.1 22.0 23.0 25.6 28.6 29.9 31.8 33.1 34.0 34.3 34.4 34.5 34.5 34.5 GB 20000 14.8 15.1 23.4 24.9 27.8 31.0 32.4 34.3 35.7 36.6 36.9 37.0 37.1 37.1 37.1 37.5 35.7 36.6 **GE 18000** 14.8 15.1 23.4 24.9 27.8 31.0 32.4 34.3 36.9 37.0 37.1 37.1 37.1 37.5 GR 16000 32.4 35.7 36.9 37.1 37.1 14.8 15.1 34.3 36.6 37.0 23.4 24.9 27.8 31.0 37.1 37.5 GE 14000 14.8 32.4 34.3 36.6 36.9 37.0 15.1 23.4 24.9 27.8 31.0 35.7 37.1 37.1 37.1 GE 12000 14.8 15.1 23.8 25.2 28.2 31.3 32.7 34.6 37.0 37.2 37.3 37.5 36.0 37.5 37.5 37.8 GE 10000 15.7 26.0 29.1 32.3 33.8 35.7 37.2 38.2 38.4 38.5 38.6 GE 9000 27.2 35.0 39.6 39.8 39.9 40.0 40.0 40.0 16.1 16.4 25.4 30.3 33.5 37.0 38.5 40.4 Œ 8000 16.4 16.6 26.3 28.2 31.6 34.9 36.5 38.6 40.2 41.2 41.5 41.6 41.7 41.7 41.7 42.0 Œ 7000 16.8 17.1 26.9 28.7 32.5 35.8 37.5 39.6 41.1 42.2 42.4 42.5 42.6 42.6 42.6 43.0 GB 6000 16.8 17.1 27.6 29.4 33.2 36.5 38.2 40.3 41.8 42.9 43.1 43.2 43.3 43.3 43.3 43.7 17.0 17.2 27.7 GE 5000 29.6 38.5 40.6 42.2 43.2 43.5 43.6 43.7 43.7 33.6 36.9 43.7 44.1 GB 4500 17.2 17.4 28.3 30.4 34.4 37.7 39.5 41.7 43.2 44.3 44.5 44.6 44.8 44.8 44.8 45.1 Œ 4000 17.9 18.1 29.4 31.8 35.8 39.2 41.0 43.2 44.8 45.8 46.1 46.2 46.3 46.3 46.3 46.6 43.2 19.8 Œ 3500 20.0 31.4 34.0 38.0 41.5 45.5 47.0 48.1 48.3 48.4 48.5 48.5 48.5 48.9 Œ 3000 22.6 23.0 34.6 37.2 41.5 44.9 46.6 48.9 50.4 51.5 51.7 51.8 51.9 51.9 51.9 52.3 Œ 2500 23.6 23.9 36.0 38.6 43.0 46.6 48.6 51.0· 52.5 53.7 53.9 54.1 54.2 54.2 54.2 Œ 2000 28.0 28.6 41.1 44.3 48.8 52.5 54.8 57.1 58.7 60.0 60.3 60.4 60.5 60.5 60.5 60.9 29.4 50.8 56.8 62.1 62.4 62.7 GE 1800 60.8 62.5 62.7 30.0 42.9 46.3 54.5 59.2 62.7 63.0 GE 1500 31.7 32.5 45.8 49.4 54.3 58.2 60.4 63.4 65.0 66.7 67.1 67.3 67.4 67.4 67.4 67.7 Œ 1200 32.6 33.5 47.1 50.6 56.1 62.9 68.1 70.0 70.7 71.0 60.1 66.3 70.8 71.0 71.0 71.4 Œ 1000 33.7 34.7 48.6 52.4 58.0 62.7 66.0 69.6 71.5 74.0 75.0 75.1 75.4 75.4 75.4 75.7 67.4 77.3 Œ 900 34.0 35.1 49.6 53.5 59.1 75.7 76.8 77.0 64.1 71.1 73.1 77.3 77.3 77.6 Œ 800 34.3 35.3 49.9 53.8 59.5 64.7 68.1 72.0 74.0 76.8 77.9 78.1 78.3 78.3 78.3 Œ 700 35.0 36.0 55.0 69.3 78.4 51.1 60.7 65.8 73.1 75.5 79.7 80.0 80.2 80.2 80.2 80.6 35.3 Œ 600 36.4 51.9 55.8 62.0 67.4 71.1 75.3 77.9 80.9 82.6 82.8 83.0 83.0 83.0 83.4 Œ 35.8 36.9 57.2 74.3 85.0 87.0 87.3 87.3 500 53.1 64.3 69.8 78.8 81.7 86.8 87.3 87.6 89.3 Œ 400 35.9 37.0 53.4 57.6 65.1 70.8 75.4 80.0 83.2 86.7 88.5 88.7 88.9 88.9 88.9 Œ 300 35.9 37.0 53.5 57.7 65.3 70.9 75.5 80.4 87.3 89.4 90.1 90.1 90.2 90.7 83.6 89.8 GR 200 35.9 37.0 53.5 57.7 65.3 70.9 75.5 80.8 84.0 87.9 90.5 90.9 92.2 92.6 93.1 94.2 Œ 100 35.9 37.0 53.5 57.7 65.3 70.9 75.5 80.8 84.0 87.9 90.5 90.9 92.2 93.1 94.3 99.6 Œ 000 35.9 37.0 53.5 57.7 65.3 70.9 75.5 80.8 84.0 87.9 90.5 90.9 92.2 93.1 94.3 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: FEB HOURS: 12-14 CRILING VISIBILITY IN METERS IN Œ Œ Œ GE Œ GE GE GE Œ GE GR **GR** GR GE æ GR 112 90 FEET 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 19.2 19.4 24.9 26.7 29.4 31.6 32.9 33.8 34.2 34.5 34.5 34.6 34.6 34.6 34.6 34.6 GE 20000 20.7 21.0 27.3 29.8 32.7 35.0 36.3 37.6 37.9 38.3 38.3 38.4 38.4 38.4 38.4 38.4 GE 18000 20.7 21.0 27.3 29.8 32.7 35.0 36.3 37.6 37.9 38.3 38.3 38.4 38.4 38.4 38.4 38.4 GE 16000 20.7 37.6 37.9 21.0 27.3 29.8 32.7 35.0 36.3 38.3 38.3 38.4 38.4 38.4 38.4 38.4 GE 14000 20.7 21.0 27.3 29.8 32.7 35.0 36.3 37.6 37.9 38.3 38.3 38.4 38.4 38.4 38.4 38.4 GE 12000 20.7 21.0 27.3 29.8 32.7 35.0 36.3 37.6 37.9 38.3 38.3 38.4 38.4 38.4 38.4 38.4 GE 10000 21.8 22.0 28.5 31.0 33.9 36.2 37.5 38.8 39.1 39.5 39.5 39.6 39.6 39.6 39.6 GE 9000 38.0 40.0 40.0 29.1 36.7 39.3 39.7 40.2 40.2 40.2 40.2 21.9 22.4 31.6 34.5 40.2 GE 8000 22.5 23.0 30.0 32.5 35.5 37.7 39.0 40.3 40.8 41.2 41.2 41.3 41.3 41.3 41.3 41.3 GE 7000 22.7 23.2 30.6 33.3 38.9 40.2 41.5 41.9 42.4 42.4 42.5 42.5 42.5 36.6 42.5 42.5 GE 6000 22.7 23.2 30.7 33.5 36.7 39.0 40.3 41.6 42.0 42.5 42.5 42.6 42.6 42.5 42.6 42.6 GR 5000 22.9 33.7 42.2 42.5 43.3 23.3 31.0 37.0 39.2 40.9 43.1 43.2 43.3 43.3 43.3 43.3 GE 4500 23.6 24.0 31.8 34.5 37.9 40.2 41.8 43.1 43.6 44.1 44.2 44.3 44.3 44.3 44.3 44.3 GE 4000 25.0 34.2 37.0 43.0 45.0 46.3 47.2 47.3 47.5 47.5 47.5 47.5 24.4 40.8 46.8 47.5 45.2 47.2 GE 3500 26.0 26.6 36.2 39.1 42.9 48.5 49.0 49.5 49.6 49.7 49.7 49.7 49.7 49.7 GE 3000 29.6 30.3 40.5 43.8 48.1 50.5 52.7 53.9 54.4 54.9 55.0 55.1 55.1 55.1 55.1 55.1 GE 2500 32.2 33.0 43.7 47.1 51.6 54.1 56.4 57.7 58.2 58.7 58.8 58.9 58.9 58.9 58.9 58.9 GE 2000 35.7 36.6 47.9 51.5 56.5 59.1 61.7 63.0 63.5 54.0 64.1 64.2 64.2 64.2 64.2 64.2 GR 1800 61.5 66.8 38.3 50.2 65.5 66.0 66.5 66.7 37.2 53.7 58.8 64.1 66.8 66.8 66.8 66.8 GE 1500 40.8 41.9 54.3 58.0 63.4 66.4 69.3 70.8 71.3 71.8 72.0 72.1 72.1 72.1 72.1 72.1 GE 1200 42.5 43.7 56.1 59.8 69.3 72.4 74.1 74.6 75.1 75.3 75.4 75.4 75.4 66.0 75.4 75.4 GE 1000 44.9 46.1 58.8 62.9 69.3 72.8 76.1 77.9 78.3 79.0 79.5 79.6 79.6 79.6 79.6 79.6 80.8 GE 900 46.4 59.5 63.6 77.0 78.8 79.3 80.1 80.7 45.2 70.0 73.7 80.8 80.B 80.8 80.8 GE 800 46.1 47.3 60.5 64.8 71.1 74.9 78.2 80.1 80.6 81.4 82.0 82.1 82.1 82.1 82.1 82.1 83.6 GE 700 46.3 47.6 65.5 82.1 82.9 83.7 61.2 72.1 76.0 79.3 81.4 83.7 83.7 83.7 83.7 77.1 80.7 GE 600 46.6 47.9 62.0 66.4 73.1 82.9 83.6 84.6 85.4 85.5 85.5 85.5 85.5 85.5 GE 79.3 85.9 88.9 500 47.0 48.3 63.4 68.1 75.3 83.2 86.8 87.8 88.6 88.88 88.9 88.9 88.9 GE 400 47.0 48.3 63.5 68.4 76.3 80.6 84.5 87.5 88.5 89.5 90.5 90.7 90.9 90.9 90.9 90.9 GE 300 47.0 63.6 80.7 90.8 92.1 92.6 48.3 68.6 76.4 84.7 88.1 89.3 92.3 92.7 93.1 93.4 GE 2001 47.0 48.3 63.6 68.6 76.4 80.7 84.7 88.1 89.6 91.2 92.8 93.4 93.9 94.1 94.6 95.3 GΕ 100 47.0 48.3 63.6 68.6 76.4 80.7 84.7 88.1 89.6 91.3 93.1 93.6 94.1 94.8 95.6 99.6 GE 000 47.0 48.3 63.6 68.6 76.4 80.7 84.7 88.1 89.6 91.3 93.1 93.6 94.1 94.8 95.6 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 MONTH: FEB HOURS: 15-17 LST TO UTC: - 1 CRILING VISIBILITY IN METERS IN GR GR Œ GE ge ge GE GE Œ GE Œ GE GR GE Œ GR 112 FEET 90 80 60 48 40 32 24 20 16 12 10 80 06 04 00 NO CEIL 21.1 21.7 27.1 27.7 30.3 31.3 32.3 32.4 32.7 32.7 32.7 32.7 32.7 32.7 32.7 32.7 GR 20000 23.7 24.4 31.6 32.7 35.6 37.0 38.3 38.4 38.8 38.8 38.8 38.8 38.8 38.8 38.8 38.8 GE 18000 23.7 24.4 31.6 35.6 37.0 38.3 38.4 38.8 38.8 38.8 38.8 32.7 38.8 38.8 38.8 38.8 GR 16000 38.3 38.8 23.7 24.4 31.6 32.7 35.6 37.0 38.4 38.8 38.8 38.8 38.8 38.8 38.8 38.8 GE 14000 23.8 24.5 31.7 32.9 35.7 37.1 38.4 38.5 38.9 38.9 38.9 38.9 38.9 38.9 38.9 38.9 GE 12000 23.8 24.5 31.7 32.9 35.7 37.1 38.4 38.5 38.9 38.9 38.9 38.9 38.9 38.9 38.9 38.9 GE 10000 25.6 33.3 34.5 37.3 38.8 40.0 40.2 40.5 40.5 40.5 40.5 40.5 40.5 40.5 Œ 9000 25.4 26.1 33.9 35.1 38.2 39.6 41.0 41.1 41.5 41.5 41.5 41.5 41.5 41.5 41.5 41.5 Œ 8000 27.1 27.9 36.2 37.5 40.5 41.9 43.5 43.6 43.9 43.9 43.9 43.9 43.9 43.9 43.9 43.9 Œ 7000 36.6 45.0 27.4 28.3 38.2 41.3 42.8 44.3 44.4 44.8 44.9 45.0 45.0 45.0 45.0 45.0 Œ 6000 27.4 28.3 37.0 38.5 41.7 43.1 44.6 44.8 45.1 45.2 45.3 45.3 45.3 45.3 45.3 45.3 27.4 37.1 Œ 5000 28.3 38.6 41.8 43.2 45.0 45.1 45.5 45.6 45.7 45.7 45.7 45.7 45.7 45.7 Œ 4500 28.2 29.0 37.9 39.5 42.6 44.1 45.8 45.9 46.3 46.4 46.5 46.5 46.5 46.5 46.5 46.5 39.7 48.1 48.2 48.4 Œ 4000 29.4 30.3 41.2 44.4 45.8 47.7 48.4 48.4 48.4 48.4 47.6 48.4 Œ 3500 31.6 32.4 41.9 43.7 46.9 48.3 50.1 50.2 50.5 50.6 50.9 50.9 50.9 50.9 50.9 50.9 Œ 3000 36.3 37.2 47.8 49.6 52.8 54.3 56.5 56.7 57.1 57.1 57.1 57.1 57.1 56.1 56.2 57.1 60.3 Œ 2500 39.1 40.0 51.4 53.2 56.5 58.1 59.8 60.0 60.4 60.9 60.9 60.9 60.9 60.9 60.9 GR 56.5 67.4 67.4 67.4 2000 42.8 43.7 58.4 62.5 64.1 66.1 66.2 66.5 66.9 67.4 67.4 67.4 GE 1800 44.4 45.3 59.1 61.1 65.5 67.3 69.3 69.5 69.8 70.2 70.7 70.7 70.7 70.7 70.7 70.7 Œ 1500 47.5 48.4 62.9 65.0 70.0 72.0 74.3 74.8 75.1 75.6 76.2 76.2 76.2 76.2 76.2 76.2 50.5 Œ 1200 51.5 66.5 69.0 74.4 76.8 79.2 79.6 80.0 80.4 81.0 81.0 81.0 81.0 81.0 81.0 Œ 1000 52.4 69.0 77.4 79.9 82.2 83.3 83.9 84.5 84.5 53.4 71.6 82.8 84.5 84.5 84.5 84.5 GR 900 52.7 53.7 69.7 72.3 78.1 80.7 83.0 83.6 84.1 84.7 85.3 85.3 85.3 85.3 85.3 85.3 GE 800 53.2 54.3 70.9 73.5 79.4 82.0 84.5 85.4 86.0 86.7 87.3 87.4 87.4 87.4 87.4 87.4 GR 700 53.6 71.5 74.1 80.1 85.5 86.5 87.0 87.9 88.5 88.6 88.6 88.6 88.6 54.7 82.9 88.6 Œ 600 53.6 54.7 71.6 74.8 80.9 83.7 86.3 87.5 88.1 88.9 89.5 89.6 89.6 89.6 89.6 89.6 αĸ 500 54.2 55.2 72.3 75.6 82.0 84.9 87.6 89.0 90.5 91.3 91.9 92.0 92.0 92.1 92.1 92.1 Œ 400 54.3 55.4 72.6 75.9 82.7 85.6 88.3 90.1 91.6 92.6 93.2 93.4 93.4 93.5 93.5 93.5 55.4 GR. 300 54.3 72.6 75.9 82.7 85.7 88.5 90.2 92.1 93.3 93.9 94.1 94.1 94.2 94.3 94.3 Œ 200 54.3 55.4 72.6 75.9 82.7 85.7 88.5 90.2 92.1 93.8 94.7 95.1 95.1 95.4 96.0 96.0 Œ 100 54.3 55.4 72.6 75.9 82.7 93.8 85.7 88.5 90.2 92.1 94.7 95.1 95.2 96.0 97.3 99.9 Œ 000 54.3 55.4 72.6 75.9 82.7 85.7 88.5 90.2 92.1 93.8 94.7 95.1 95.2 96.0 97.3 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 STATION NUMBER: 106070 LST TO UTC: - 1 MONTH: FEB HOURS: 18-20 CRILING VISIBILITY IN METERS IN GE GR GE GE GR GE GΕ Œ GE GE GR Œ GE Œ GE 112 90 32 FRET 80 60 48 40 24 20 16 12 10 80 06 04 00 NO CEIL 24.0 24.7 30.5 31.4 32.6 33.6 33.9 34.6 34.7 35.1 35.1 35.1 35.1 35.1 35.1 35.1 GE 20000 27.8 28.5 35.3 36.4 38.3 39.5 39.9 40.9 41.0 41.3 41.3 41.3 41.3 41.3 41.3 41.3 GE 18000 27.8 28.5 35.3 36.4 38.3 39.5 39.9 40.9 41.0 41.3 41.3 41.3 41.3 41.3 41.3 41.3 GE 16000 27.8 28.5 35.3 39.5 39.9 40.9 36.4 38.3 41.0 41.3 41.3 41.3 41.3 41.3 41.3 41.3 GR 14000 27.8 28.5 35.3 36.4 38.3 39.5 39.9 40.9 41.0 41.3 41.3 41.3 41.3 41.3 41.3 41.3 **GE 12000** 27.8 28.6 35.5 36.5 38.5 39.7 40.2 41.1 41.2 41.6 41.6 41.6 41.6 41.6 41.6 41.6 GE 10000 42.9 28.5 29.3 36.5 37.7 39.8 41.0 41.5 42.4 42.5 42.9 42.9 42.9 42.9 GE 9000 28.9 29.7 36.9 38.2 40.3 41.5 41.9 42.9 43.0 43.3 43.3 43.3 43.3 43.3 43.3 43.3 GE 8000 30.7 31.7 38.9 40.2 42.3 43.8 44.3 45.2 45.3 45.7 45.7 45.7 45.7 45.7 45.7 45.7 7000 GE 31.3 32.3 39.6 40.9 43.0 44.5 45.0 45.9 46.1 46.4 46.4 46.4 46.4 46.4 46.4 46.4 GR 6000 44.8 45.2 46.3 46.6 46.6 46.6 46.6 31.4 32.4 39.7 41.0 43.2 46.2 46.6 46.6 46.6 GE 5000 47.3 47.5 47.8 47.8 31.7 32.6 40.4 41.7 45.6 46.4 47.8 47.8 47.8 47.8 47.8 44.1 GR. 4500 32.0 33.0 40.8 42.2 44.6 46.2 47.1 48.1 48.2 48.5 48.5 48.5 48.5 48.5 48.5 48.5 50.3 50.3 GE 4000 33.6 34.5 42.3 43.7 46.3 47.9 48.9 49.8 49.9 50.3 50.3 50.3 50.3 50.3 GE 3500 50.9 36.3 37.3 45.2 53.0 53.1 53.5 53.5 46.6 49.2 51.8 53.5 53.5 53.5 53.5 53.5 GE 3000 39.6 40.8 49.2 50.6 53.7 55.5 56.4 57.6 57.7 58.1 58.1 58.1 58.1 58.1 58.1 58.1 GE 2500 40.8 41.9 51.4 52.9 56.1 57.8 58.9 60.2 60.3 60.7 60.7 60.7 60.7 60.7 60.7 60.7 GE 2000 44.4 45.7 56.4 58.5 62.4 64.5 65.6 66.9 67.0 67.5 67.5 67.5 67.5 67.5 67.5 67.5 58.7 67.4 70.0 70.4 70.4 70.4 70.4 70.4 70.4 GR 1800 61.1 69.8 70.4 45.8 47.1 65.0 68.6 GE 1500 48.1 49.4 62.2 65.1 69.8 72.4 74.0 75.4 75.6 76.3 76.3 76.3 76.3 76.3 76.3 76.3 GE 1200 49.2 50.6 64.1 67.5 75.4 78.6 78.8 79.7 79.9 79.9 79.9 79.9 72.6 76.9 79.9 79.9 GE 1000 51.0 52.4 66.5 70.0 75.1 78.0 79.5 81.2 81.6 82.9 83.0 83.0 83.0 83.0 83.0 83.0 67.1 78.9 84.1 84.2 84.2 GE 900 51.6 53.0 70.6 76.1 80.4 82.2 82.8 84.2 84.2 84.2 84.2 GE 800 51.8 53.2 67.4 70.8 76.4 79.6 81.2 83.6 84.5 85.7 85.9 85.9 85.9 85.9 85.9 85.9 GE 85.0 85.9 87.2 87.5 700 52.5 53.9 68.4 71.8 77.5 80.9 82.6 87.4 87.5 87.5 87.5 87.5 GE 600 52.8 54.2 68.9 72.7 78.6 82.1 83.7 86.6 87.5 88.8 89.0 89.2 89.2 89.2 89.2 89.2 GR 500 53.1 54.5 69.6 73.4 79.4 83.2 84.8 87.8 89.0 90.8 91.3 91.5 91.5 91.5 91.5 91.5 GE 400 53.1 54.5 69.6 73.5 80.1 83.9 85.6 88.8 90.3 92.2 92.7 93.3 93.3 93.3 93.3 93.3 53.1 69.6 89.9 91.5 93.6 94.1 94.7 GR 300 54.5 73.5 80.3 84.1 86.5 94.7 94.8 94.8 94.8 CR 200 53.1 54.5 69.6 73.5 80.3 84.1 86.5 90.1 91.8 94.1 94.8 95.5 95.6 96.1 96.5 96.5 GE 100 53.1 54.5 69.6 73.5 80.3 84.1 86.5 90.1 91.8 94.1 95.1 95.8 95.9 96.5 97.4 99.3 GE 000 53.1 54.5 69.6 73.5 80.3 84.1 86.5 90.1 91.8 94.1 95.1 95.8 95.9 96.5 97.4 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: 7EB HOURS: 21-23

				LST	TO UTC	: - 1					MONTH:	788	HOURS:	21-23			
CEI	LING	•••••	• • • • • • •	• • • • • • •	• • • • • • •	••••••	VISIBIL:	י אד עיתי	METERS	• • • • • • •	• • • • • • • •	•••••	• • • • • •	• • • • • • •	• • • • • • •	• • • • • •	•••••
	M	GE	Œ	GE	GE	GE	GE GE	GE	GE GE	GE	GE	GE	Œ	GE	Œ	GE	GE
	ET	112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
			• • • • • • •		• • • • • • •					•••••			• • • • • • •				•••••
NO	CEIL	27.4	28.0	33.2	34.5	36.5	37.2	37.9	38.3	38.3	38.3	38.8	38.8	38.9	38.9	38.9	39.0
CP	20000	31.2	31.8	37.8	39.2	41.8	42.6	43.5	43.9	43.9	43.9	44.4	44.4	44.5	44.5	44.5	44.6
	18000	31.2	31.8	37.8	39.2	41.8	42.6	43.5	43.9	43.9	43.9	44.4	44.4	44.5	44.5	44.5	44.6
	16000	31.2	31.8	37.8	39.2	41.8	42.6	43.5	43.9	43.9	43.9	44.4	44.4	44.5	44.5	44.5	44.6
	14000	31.2	31.8	37.8	39.2	41.8	42.6	43.5	43.9	43.9	43.9	44.4	44.4	44.5	44.5	44.5	44.6
	12000	31.6	32.2	38.2	39.6	42.2	43.0	43.8	44.3	44.3	44.3	44.8	44.8	44.9	44.9	44.9	45.0
Œ	10000	32.0	32.6	38.6	40.0	42.6	43.5	44.3	44.8	44.8	44.8	45.2	45.2	45.3	45.3	45.3	45.5
Œ	9000	32.2	32.7	38.8	40.2	42.8	43.6	44.4	44.9	44.9	44.9	45.3	45.3	45.5	45.5	45.5	45.6
Œ	8000	33.9	34.5	40.5	41.9	44.5	45.5	46.4	46.9	46.9	46.9	47.3	47.3	47.5	47.5	47.5	47.6
Œ	7000	34.0	34.6	40.8	42.2	44.8	45.7	46.6	47.1	47.1	47.1	47.6	47.6	47.7	47.7	47.7	47.8
Œ	6000	34.2	34.7	40.9	42.3	44.9	45.8	46.8	47.2	47.2	47.2	47.7	47.7	47.8	47.8	47.8	47.9
Œ	5000	34.2	34.7	40.9	42.3	44.9	46.1	47.0	47.5	47.5	47.5	47.9	47.9	48.1	48.1	48.1	48.2
Œ	4500	34.9	35.6	41.9	43.3	45.9	47.1	48.1	48.5	48.5	48.5	49.0	49.0	49.1	49.1	49.1	49.2
Œ	4000	36.7	37.5	43.9	45.3	46.1	49.2	50.2	50.6	50.6	50.6	51.1	51.1	51.2	51.2	51.2	51.4
GE	3500	38.3	39.0	45.9	47.5	50.2	51.5	52.4	53.0	53.0	53.0	53.5	53.5	53.6	53.6	53.6	53.7
Œ	3000	41.1	41.8	49.2	50.8	53.8	55.4	56.3	56.9	56.9	56.9	57.4	57.4	57.5	57.5	57.5	57.6
Œ	2500	42.8	43.6	51.8	53.7	56.8	58.3	59.5	60 . 1	60.1	60.1	60.5	60.5	60.7	60.7	60.7	60.8
GE	2000	46.1	47.0	55.8	58.0	61.0	62.8	64.1	64.7	64.7	64.7	65.1	65.1	65.3	65.3	65.3	65.4
GE	1800	47.1	48.1	57.4	59.7	62.9	64.8	66.1	66.7	66.7	66.7	67.1	67.1	67.3	67.3	67.3	67.4
GE	1500	49.1	50.1	59.8	62.3	65.7	67.6	69.4	70.2	70.3	70.3	70.9	70.9	71.0	71.0	71.0	71.1
GE	1200	50.8	51.7	63.1	65.6	69.5	71.6	73.6	74.7	74.9	75.3	75.9	76.0	76.1	76.1	76.1	76.2
Œ	1000	52.4	53.5	65.4	68.1	72.3	74.4	76.6	77.6	78.0	78.6	79.2	79.3	79.4	79.4	79.4	79.5
GE	900	53.7	54.8	66.7	69.4	73.7	76.0	78.4	80.1	80.4	81.0	81.6	81.7	81.9	81.9	81.9	82.0
GE	800	53.9	55.0	67.1	70.0	74.8	77.4	79.9	81.5	82.1	82.7	83.4	83.5	83.6	83.6	83.6	83.7
Œ	700	54.5	55.6	68.1	70.9	76.1	78.9	81.4	83.0	83.6	84.2	85.0	85.2	85.3	85.3	85.3	85.4
Œ	600	55.1	56.2	68.9	71.7	77.0	80.2	82.7	84.7	85.3	85.9	86.7	86.8	86.9	86.9	86.9	87.0
GE	500	55.1	56.2	69.0	72.0	77.7	80.9	83.7	86.3	87.0	87.8	88.6	89.2	89.3	89.3	89.3	89.4
Œ	400	55.2	56.3	69.4	72.6	78.7	81.9	84.8	87.5	88.2	89.2	90.2	90.8	90.9	91.0	91.0	91.2
GE	300	55.2	56.3	69.4	73.0	79.4	82.7	86.3	89.4	90.2	91.5	92.9	93.8	94.0	94.1	94.1	94.2
GE	200	55.2	56.3	69.4	73.0	79.4	82.7	86.3	89.5	90.3	91.9	93.4	94.3	94.6	94.7	95.4	95.8
GE	100	55.2	56.3	69.4	73.0	79.5	82.8	86.6	90.0	90.8	92.3	93.9	94.8	95.1	95.4	96.5	99.4
GE	000	55.2	56.3	69.4	73.0	79.5	82.8	86.6	90.0	90.8	92.3	93.9	94.8	95.1	95.4	96.5	100.0
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PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STA	TION 1	TUMBER:	106070		TON NAI		ndahlem	AB/GERI	MANY			OF RECO		AN 80 - L	DEC 89	•	
•••	LING	• • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • • •		ITY IN I		• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • •	· · · · · · ·	•••••
	N TIME	GE	GE	GE	GE	GE	GE GE	GE	GE	GE	GE	GE	GE	Œ	GE	GE	GE
_	ET	112	90	80 80	60	48	40	32	24	20	16	12	10	08	06	04	00
41	PT	112	90	80	80	40	40	32	24	20	10	12	10	Vo	00	04	00
•••	••••	i	•••••			• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •		• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •		•••••
NO	CEIL	20.4	20.9	27.2	28.4	30.9	32.2	33.3	34.1	34.5	34.7	34.8	34.9	34.9	35.0	35.1	35.2
GE	20000	22.7	23.2	30.5	32.0	34.9	36.3	37.5	38.5	38.9	39.1	39.3	39.4	39.4	39.4	39.5	39.7
GE	18000	22.7	23.2	30.6	32.1	35.0	36.4	37.6	38.6	39.0	39.2	39.4	39.4	39.5	39.5	39.6	39.8
GE	16000	22.7	23.2	30.6	32.1	35.0	36.4	37.6	38.6	39.0	39.2	39.4	39.4	39.5	39.5	39.6	39.8
GE	14000	22.8	23.3	30.6	32.1	35.0	36.4	37.6	38.6	39.0	39.2	39.4	39.5	39.5	39.5	39.6	39.8
GE	12000	22.9	23.4	30.7	32.2	35.1	36.5	37.8	38.8	39.1	39.4	39.6	39.6	39.7	39.7	39.8	39.9
GR	10000	23.7	24.3	31.9	33.4	36.3	37.7	39.0	40.0	40.4	40.7	40.8	40.9	40.9	41.0	41.1	41.2
GE	9000	24.1	24.7	32.4	34.0	37.0	38.4	39.7	40.7	41.1	41.4	41.6	41.6	41.7	41.7	41.8	41.9
GE	8000	25.2	25.8	33.8	35.4	38.5	39.9	41.3	42.4	42.8	43.1	43.3	43.3	43.4	43.4	43.5	43.7
GE	7000	25.5	26.2	34.3	36.0	39.3	40.8	42.1	43.2	43.6	43.9	44.1	44.2	44.2	44.3	44.4	44.5
GE	6000	25.6	26.3	34.5	6.2ء	39.5	41.0	42.4	43.4	43.8	44.2	44.4	44.4	44.5	44.5	44.6	44.8
GE	5000	25.9	26.5	34.9	36.6	39.9	41.4	42.9	44.0	44.4	44.7	45.0	45.0	45.1	45.1	45.2	45.3
GE	4500	25.9	27.0	35.5	37.2	40.6	42.2	42.9		45.2	45.6	45.8	45.8	45.1	45.9	45.2	45.3 46.1
	4000	27.6	28.3	37.3	39.1	40.6	44.1	45.7	44.8	47.2	47.6	47.8	47.8	47.9	47.9		
GE	3500	29.6		37.3					46.8	50.0		50.6		50.7		48.0	48.2
GE GE	3000		30.4		41.6	45.2 49.0	46.8	48.5	49.6		50.4		50.6		50.7	50.8	51.0
GB	3000	32.5	33.3	43.2	45.2	49.0	50.8	52.5	53.7	54.2	54.5	54.8	54.8	54.9	54.9	55.0	55.2
GE	2500	34.0	34.9	45.3	47.3	51.3	53.1	55.1	56.3	56.8	57.2	57.4	57.5	57.5	57.6	57.7	57.8
GE	2000	37.8	38.8	50.2	52.5	56.9	58.8	61.0	62.2	62.6	63.1	63.4	63.5	63.5	63.6	63.7	63.8
GE	1800	39.2	40.2	52.1	54.5	59.0	61.1	63.2	64.6	65.1	65.6	65.9	65.9	66.0	66.0	66.1	66.3
GE	1500	41.8	42.9	55.6	58.2	63.1	65.3	67.7	69.3	70.0	70.6	71.0	71.0	71.1	71.1	71.2	71.3
GE	1200	43.6	44.8	58.3	61.0	66.3	68.8	71.4	73.3	74.0	74.7	75.2	75.2	75.3	75.3	75.4	75.6
GE	1000	45.4	46.5	60.6	63.5	69.3	71.9	74.6	76.6	77.5	78.5	79.1	79.2	79.2	79.3	79.4	79.5
GE	900	46.1	47.3	61.5	64.5	70.4	73.1	75.9	78.0	79.0	80.0	80.6	80.7	80.8	80.8	80.9	81.1
GE	800	46.5	47.8	62.2	65.3	71.5	74.3	77.1	79.5	80.5	81.6	82.2	82.3	82.4	82.4	82.6	82.7
GE	700	47.1	48.3	63.1	66.2	72.5	75.5	78.4	80.8	81.9	83.1	83.8	83.9	84.0	84.0	84.1	84.3
GE	600	47.5	48.7	63.8	67.0	73.5	76.6	79.6	82.2	83.5	84.6	85.5	85.6	85.7	85.7	85.8	86.0
GE	500	47.9	49.1	64.7	68.1	75.1	78.3	81.7	84.6	86.2	87.5	88.4	88.6	88.8	88.8	88.9	89.1
GE	400	48.0	49.3	64.9	68.5	76.0	79.2	82.8	85.9	87.6	89.1	90.2	90.5	90.6	90.7	90.8	91.0
GE	300		49.3	65.1	68.7	76.3	79.6	83.4	86.7	88.6	90.3	91.6	92.0	92.2	92.4	92.6	92.8
GE	200	48.1	49.3	65.1	68.7	76.4	79.7	83.5	86.9	88.9	90.8	92.5	93.1	93.5	93.9	94.5	95.0
GE	100		49.3	65.1	68.7	76.4	79.7	83.5	87.1	89.0	91.0	92.8	93.4	93.9	94.6	95.7	99.6
GE	000	48.1	49.3	65.1	68.7	76.4	79.7	83.5	87.1	89.0	91.0	92.8	93.4	93.9	94.6	95.7	100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CRILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: MAR HOURS: 00-02 CRILING VISIBILITY IN METERS IN GE Œ GE Œ Œ Œ GE GE GE GR GR Œ GE Œ GR Œ 112 90 80 60 48 24 20 16 12 10 80 04 00 FRET 40 32 06 NO CRIL 21.8 22.3 26.9 27.4 29.6 31.0 31.6 31.8 31.8 31.8 32.2 32.2 32.2 32.3 32.3 32.3 GE 20000 37.8 37.8 37.8 38.2 38.2 38.2 38.3 38.3 26.0 26.7 32.0 32.6 35.1 36.7 37.6 38.3 GE 18000 26.0 26.7 32.0 32.6 35.1 36.7 37.6 37.8 37.8 37.8 38.2 38.2 38.2 38.3 38.3 38.3 GE 15000 26.0 26.7 32.0 32.6 35.1 36.7 37.6 37.8 37.8 37.8 38.2 38.2 38.2 38.3 38.3 38.3 38.3 38.3 38.7 38.7 35.1 36.7 35.5 37.1 37.8 38.2 GE 14000 26.0 26.7 37.8 37.8 38.2 38.2 38.3 32.0 32.6 37.6 38.3 38.6 GE 12000 26.1 26.8 32.2 32.9 38.1 38.3 38.3 38.6 38.6 38.7 GR 10000 26.9 27.8 33.2 34.0 36.8 38.4 39.4 39.6 39.6 39.6 39.9 39.9 39.9 40.0 40.0 40.0 GE 9000 27.3 28.3 33.9 34.6 37.4 39.0 40.0 40.2 40.2 40.2 40.5 40.5 40.5 40.6 40.6 40.6 43.3 40.1 41.7 GTR 8000 28.9 29.9 35.8 36.6 42.7 42.9 42.9 42.9 43.2 43.2 43.2 43.3 43.3 GB 7000 29.4 30.3 36.3 37.1 40.6 42.3 43.3 43.5 43.5 43.5 43.9 43.9 43.9 44.0 44.0 44.0 GE 6000 29.4 30.3 36.3 37.1 40.6 42.3 43.5 43.5 43.5 43.9 44.0 44.0 43.3 43.9 43.9 44.0 GR 5000 30.5 31.5 37.5 38.3 41.8 43.4 44.7 44.7 44.7 45.1 45.1 45.1 45.2 45.2 45.2 44.5 GR 4500 32.4 33.4 39.7 40.4 44.0 45.6 46.9 46.9 46.9 47.3 47.3 47.3 47.4 47.4 46.7 47.4 Œ 4000 34.9 36.2 42.8 43.5 47.4 49.0 50.1 50.4 50.4 50.4 50.9 50.9 50.9 51.0 51.0 51.0 GE 3500 37.4 38.8 45.7 50.4 53.5 53.5 54.0 54.0 54.0 54.1 54.1 46.6 52.0 53.1 53.5 54.1 GE 3000 43.4 45.1 52.5 53.7 57.6 59.2 60.5 61.2 61.2 61.2 61.7 61.7 61.8 61.9 61.9 61.9 60.0 GR 2500 54.7 44.8 46.6 56.0 61.6 63.1 63.8 63.8 63.8 64.3 64.3 64.4 64.5 64.5 64.5 GE 2000 49.6 51.5 60.8 62.2 66.7 70.3 71.0 71.0 71.0 71.5 71.5 71.6 71.7 71.7 68.4 71.7 Œ 1800 51.6 53.7 63.0 64.5 69.0 70.8 72.7 73.3 73.3 73.3 73.9 73.9 74.0 74.1 74.1 74.1 GE 1500 54.3 56.3 66.3 67.8 72.4 74.2 76.1 76.8 76.8 76.8 77.3 77.3 77.4 77.5 77.5 77.5 Œ 1200 56.9 59.1 69.8 71.4 76.5 78.3 80.2 80.9 80.9 80.9 81.5 81.5 81.6 81.7 81.7 81.7 Œ 1000 59.5 61.7 73.0 74.7 80.0 81.9 83.9 84.6 84.6 84.9 85.6 85.6 85.7 85.8 85.0 Œ 60.9 63.3 75.1 76.8 82.0 87.3 87.6 88.3 88.3 88.5 900 84.5 86.6 87.3 88.4 88.5 88.5 88.4 89.2 Œ 800 61.4 63.9 75.7 77.4 82.7 85.2 87.2 88.1 88.1 89.0 89.0 89.1 89.2 89.2 Œ 700 62.7 77.2 90.1 90.4 91.3 91.5 65.2 79.0 84.4 87.1 89.2 90.1 91.3 91.4 91.5 91.5 91.3 92.4 92.4 63.1 65.6 77.7 92.2 85.3 88.0 Œ 79.6 600 90.1 91.0 91.0 92.2 92.3 92.4 93.1 94.3 94.3 96.2 96.2 Œ 63.3 78.2 94.1 500 65.8 80.0 86.3 89.2 91.5 92.8 92.8 94.1 94.2 94.3 GR 400 63.7 66.1 78.5 80.3 86.7 89.6 92.3 93.7 93.7 94.0 95.6 95.7 95.8 96.2 Œ 300 63.7 66.1 78.5 80.3 87.2 90.1 93.0 94.4 94.4 94.8 96.8 97.1 97.2 97.6 97.6 97.6 63.7 78.5 87.2 93.2 95.2 Œ 200 66.1 80.3 90.1 95.2 95.6 97.6 98.5 98.7 99.1 99.4 99.4 99.9 Œ 100 63.7 66.1 78.5 80.3 87.2 90.1 93.2 95.2 95.2 95.6 97.6 98.7 98.9 99.7 99.9 Œ 000 63.7 66.1 78.5 80.3 87.2 90.1 93.2 95.2 95.2 95.6 97.6 98.7 98.9 99.7 100.0 100.0

TOTAL NUMBER OF OBSERVATIONS 930

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: MAR HOURS: 03-05 CEILING VISIBILITY IN METERS IN Œ GE Œ GE GE GE GE GE GE GE Œ GE GE GE GE GR 90 FEET 112 80 60 48 40 32 20 06 00 24 16 12 10 08 04 NO CEIL 17.3 17.6 23.8 24.5 27.2 28.0 28.7 29.5 30.1 30.6 31.3 31.4 31.4 31.4 31.5 GE 20000 21.3 21.6 32.0 35.7 28.1 29.1 33.0 33.8 34.5 35.2 36.3 36.5 36.5 36.5 36.6 36.6 GE 18000 35.7 21.3 21.6 28.1 29.1 32.0 33.0 33.8 34.5 35.2 36.3 36.5 36.5 36.5 36.6 36.6 GR 16000 21.3 21.6 28.1 29.1 32.0 33.0 33.8 34.5 35.2 35.7 36.3 36.5 36.5 36.5 36.6 36.6 GE 14000 32.0 35.7 21.3 21.6 28.1 29.1 33.0 33.8 34.5 35.2 36.3 36.5 36.5 36.5 36.6 36.6 32.4 33.3 36.8 36.9 36.9 34.1 36.0 36.7 36.8 GE 12000 21.6 21.9 28.4 29.5 34.8 35.5 36.8 GE 10000 22.8 29.2 35.1 37.0 37.6 37.7 22.5 30.3 33.3 34.3 35.8 36.5 37.7 37.7 37.8 37.8 GR 9000 22.6 22.9 29.8 30.9 33.9 34.8 35.6 36.3 37.0 37.5 38.2 38.3 38.3 38.3 38.4 38.4 GE 8000 23.0 23.3 30.3 31.4 35.5 36.6 37.5 38.3 38.9 39.5 40.1 40.2 40.2 40.2 40.3 40.3 GE 7000 23.3 35.5 23.0 30.3 31.4 36.6 37.5 38.4 39.0 39.6 40.2 40.3 40.3 40.3 40.4 40.4 GE 6000 23.1 23.4 30.4 31.5 35.6 36.7 37.6 38.5 39.1 39.7 40.3 40.4 40.4 40.4 40.5 40.5 GR 5000 23.8 24.1 31.2 32.3 36.3 37.4 38.4 39.2 39.9 40.4 41.1 41.2 41.2 41.2 41.3 41.3 39.5 GE 4500 25.1 37.4 24.7 32.3 33.3 38.5 40.3 41.0 41.5 42.2 42.3 42.3 42.3 42.4 42.4 GR 4000 27.4 36.2 40.3 45.7 27.1 35.2 41.4 42.9 43.8 44.4 44.9 45.6 45.7 45.7 45.8 45.8 GE 3500 29.4 29.7 37.7 38.9 43.1 44.3 45.8 46.9 47.5 48.2 48.8 48.9 49.0 49.0 49.1 49.1 GE 3000 32.8 33.1 43.2 47.7 48.9 50.4 53.1 53.9 54.0 41.9 51.8 52.5 54.1 54.1 54.2 54.2 56.8 GE 2500 34.9 35.4 44.6 45.9 50.4 51.6 53.1 54.5 55.2 55.8 56.6 56.7 56.8 56.9 56.9 GE 2000 51.8 56.3 39.8 40.4 50.2 58.0 59.7 61.2 61.8 62.5 63.2 63.3 63.4 63.4 63.5 63.5 GE 1800 40.8 41.4 51.2 52.9 57.6 59.2 61.0 62.5 63.1 63.8 64.5 64.6 64.7 64.7 64.8 64.8 GE 1500 44.5 45.2 55.7 57.5 63.0 64.7 66.5 68.2 69.0 69.7 70.4 70.5 70.6 70.6 70.8 70.8 GE 1200 47.8 48.5 60.0 61.9 67.6 69.4 71.2 73.3 74.2 74.8 75.6 75.7 75.8 75.8 75.9 75.9 GE 1000 49.8 50.4 62.8 64.8 70.9 72.6 74.8 77.2 78.1 78.8 79.6 79.7 79.8 79.8 79.9 79.9 GE 900 51.3 51.9 64.7 66.9 73.0 74.7 77.0 79.5 80.3 81.1 81.8 82.0 82.2 82.2 82.3 82.3 83.7 GR 800 52.4 68.2 82.9 53.0 65.9 74.6 76.5 78.8 82.2 83.9 81.3 84.0 84.0 84.1 84.1 GE 700 53.4 54.1 67.3 69.9 76.3 78.3 80.8 83.2 84.1 85.1 85.8 86.0 86.1 86.1 86.2 86.2 78.0 79.9 87.1 87.8 GE 600 53.8 54.4 88.2 88.3 88.3 68.3 71.0 82.8 85.3 86.1 88.1 88.2 500 79.7 GE 54.0 54.6 69.0 71.8 81.6 84.8 87.7 88.8 90.2 91.2 91.4 91.5 91.5 91.6 91.6 GE 400 69.2 72.2 80.5 82.7 86.7 94.5 54.2 54.8 90.0 91.2 92.7 93.7 93.9 94.0 94.0 94.5 GE 300 54.2 54.8 69.2 72.4 81.1 83.2 87.4 90.8 91.9 93.5 94.7 95.3 95.4 95.4 95.9 95.9 200 GE 54.2 54.8 69.2 72.4 81.2 83.3 88.0 91.5 92.7 94.5 96.0 97.2 97.3 97.8 98.9 98.9 GE 100 54.2 54.8 69.2 72.4 81.2 83.3 88.0 91.5 92.7 94.5 96.0 97.2 97.4 98.0 99.7 99.8 GE 000 54.2 54.8 69.2 72.4 81.2 83.3 88.0 91.5 92.7 94.5 95.0 97.2 97.4 98.0 99.7 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 STATION NUMBER: 106070 MONTH: MAR HOURS: 06-08 LST TO UTC: - 1 CRILING VISIBILITY IN METERS GE GR GR GE GE GE GR GE GE GR GE GE GR GR. IN GR GR FRET 112 90 80 60 48 40 32 24 20 16 12 10 80 06 04 00 NO CEIL 10.2 10.3 14.8 15.5 18.9 20.4 21.0 21.7 22.6 23.1 23.4 23.5 23.9 24.2 24.3 GE 20000 12.5 12.6 17.8 18.8 22.6 24.3 25.2 25.9 26.8 27.4 27.7 27.8 28.2 28.5 28.6 28.8 GE 18000 12.5 12.6 17.8 18.8 22.6 24.3 25.2 25.9 26.8 27.4 27.7 27.8 28.2 28.5 28.6 28.8 **GE 16000** 12.5 12.6 17.8 18.8 22.6 24.3 25.2 25.9 26.8 27.4 27.7 27.8 28.2 28.5 28.6 28.8 GE 14000 12.5 12.5 17.8 18.8 22.6 24.3 25.2 25.9 26.8 27.4 27.7 27.8 28.2 28.5 **GE 12000** 22.6 24.3 25.2 26.8 27.7 27.8 28.2 28.5 28.6 12.5 12.6 17.8 18.8 25.9 27.4 28.8 GE 10000 12.9 13.0 18.8 19.8 23.7 25.6 26.8 27.5 28.4 29.0 29.4 29.5 29.8 GR 9000 26.3 30.2 13.4 29.1 29.8 30.1 30.5 31.0 13.3 19.2 20.4 24.3 27.5 28.3 30.9 31.2 Œ 8000 14.8 14.9 21.2 22.5 26.8 28.9 30.8 31.7 32.6 33.2 33.7 33.9 34.2 34.5 34.6 34.8 Œ 7000 27.0 35.2 14.9 15.1 22.7 29.1 33.1 33.8 34.2 34.4 34.7 35.1 21.4 31.3 32.3 35.4 Œ 6000 14.9 15.1 21.4 22.7 27.0 29.1 31.3 32.3 33.1 33.8 34.2 34.4 34.7 35.1 35.2 35.4 Œ 34.7 5000 15.5 15.6 21.9 23.2 27.5 29.7 32.8 33.7 34.9 35.3 35.6 35.7 35.9 31.8 34.3 Œ 4500 16.0 16.1 22.5 23.8 28.3 30.4 32.6 33.5 34.4 35.1 35.5 35.7 36.0 36.3 36.5 36.7 Œ 4000 17.0 17.1 23.4 29.6 31.9 35.2 36.3 37.0 37.4 37.6 38.0 38.3 38.4 38.6 24.8 34.1 40.8 GR 3500 18.9 19.1 25.7 27.1 31.8 34.3 36.5 37.5 38.7 39.4 39.8 40.0 40.3 40.6 41.0 Œ 3000 21.7 28.8 30.2 35.6 38.1 40.2 41.3 42.6 43.3 43.8 44.0 44.3 44.7 44.8 45.1 GR 2500 23.9 24.1 31.8 33.5 39.1 41.6 43.8 44.8 46.1 46.9 47.3 47.5 47.8 48.3 48.4 48.6 GE 2000 27.5 28.0 36.8 38.7 44.8 47.4 49.7 50.8 52.0 53.0 53.4 53.7 54.0 54.4 54.5 54.7 55.2 56.1 56.8 29.4 55.8 GE 1800 28.8 38.3 40.3 46.7 49.4 51.6 52.9 54.2 55.6 56.7 57.0 Œ 1500 32.0 32.8 42.7 45.1 51.9 54.8 57.2 58.6 59.9 61.0 61.5 61.7 62.0 62.7 62.8 63.0 67.4 Œ 1200 34.3 35.1 65.6 66.1 66.3 67.3 45.4 48.2 55.5 58.8 61.3 63.2 64.5 66.7 67.6 Œ 1000 35.7 36.5 47.7 51.1 59.2 62.6 65.3 67.5 68.8 69.9 70.4 70.6 71.0 71.6 71.7 71.9 GR 36.5 37.2 49.5 61.2 67.3 72.3 72.8 73.0 74.1 900 52.9 64.5 69.7 71.0 73.3 74.0 74.3 Œ 800 37.2 38.0 50.5 54.1 62.8 66.1 69.2 71.7 73.0 74.3 74.8 75.1 75.4 76.0 76.1 Œ 72.2 78.6 78.9 700 38.3 39.0 52.7 56.6 65.5 68.8 75.1 76.6 78.0 79.2 80.1 80.2 80.4 38.9 83.1 GE 600 39.7 54.0 58.1 67.5 71.2 74.6 77.6 79.2 80.9 81.5 81.8 82.2 83.0 83.3 Œ 73.0 500 39.2 40.0 54.7 58.9 68.8 77.0 80.4 82.2 84.5 85.4 85.9 86.3 87.2 87.3 87.5 Œ 400 39.4 40.1 55.2 59.5 70.1 74.7 79.5 83.3 85.4 87.7 88.7 89.4 89.9 90.8 91.0 91.5 GE 40.3 300 39.6 55.6 60.1 71.1 75.7 80.5 84.5 86.9 89.2 90.5 91.6 92.3 93.2 93.4 94.2 Œ 200 39.6 40.3 55.6 60.1 71.4 76.0 81.0 85.2 87.5 90.3 91.7 93.4 94.3 95.8 96.2 97.2 Œ 100 39.6 40.3 55.6 60.1 71.4 76.0 81.1 85.3 87.6 90.5 91.9 93.9 94.8 96.8 98.3 99.7 GE 000 39.6 40.3 55.6 60.1 71.4 76.0 81.1 85.3 87.6 90.5 91.9 93.9 94.8 96.8 98.3 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 STATION NUMBER: 106070 LST TO UTC: - 1 MONTH: MAR HOURS: 09-11 VISIBILITY IN METERS CEILING GE GE GE IN Œ GR Œ CR CE GR GR GR GR Œ GR Œ GR FEET 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 9.6 9.7 15.8 19.1 19.6 21.1 21.8 22.2 22.8 23.0 23.1 23.2 23.2 23.3 23.3 14.8 GE 20000 12.6 12.8 19.0 20.4 24.8 25.4 27.3 28.2 28.5 29.1 29.4 29.5 29.6 29.6 29.7 29.7 GE 18000 20.5 25.5 27.4 28.3 28.6 29.2 29.5 29.6 29.7 29.7 29.8 29.8 12.7 12.9 19.1 24.9 GE 16000 12.7 12.9 19.1 20.5 24.9 25.5 27.4 28.3 28.6 29.2 29.5 29.6 29.7 29.7 29.8 29.8 GE 14000 12.8 13.0 19.2 20.6 25.1 25.6 27.5 28.4 28.7 29.4 29.6 29.7 29.8 29.8 29.9 29.9 GE 12000 12.9 20.8 27.6 28.5 28.8 29.5 29.8 29.9 30.0 30.0 13.1 19.4 25.2 25.7 29.7 29.9 30.5 GE 10000 13.5 13.8 20.2 21.6 26.2 27.1 29.1 30.2 31.2 31.4 31 5 31.6 31.6 31.7 31.7 GE 9000 13.9 14.1 20.5 22.4 27.0 28.0 30.0 31.1 31.4 32.0 32.4 32.5 32.6 32.6 32.7 32.7 GE 8000 15.2 15.4 22.0 23.9 28.8 30.1 32.5 34.1 34.4 35.1 35.4 35.7 35.9 36.0 36.1 36.1 34.7 35.4 36.1 GE 7000 15.4 32.8 34.4 35.8 36.5 15.2 22.0 23.9 28.9 30.3 36.3 36.6 36.6 GE 6000 15.2 15.4 22.0 23.9 28.9 30.3 32.8 34.4 34.7 35.4 35.8 36.1 36.3 36.6 GE 5000 15.5 15.7 22.6 24.4 29.5 31.1 33.5 35.2 35.5 36.1 36.6 36.9 37.1 37.2 37.3 37.3 GE 4500 15.7 15.9 22.9 24.8 30.0 31.6 34.1 35.8 36.1 36.8 37.2 37.5 37.7 37.8 38.0 38.0 38.5 GE 4000 39.1 39.9 40.3 17.1 17.4 24.7 26.9 32.0 33.8 36.2 38.0 39.6 40.1 40.2 40.3 GE 3500 18.8 19.2 26.9 29.1 34.5 36.2 38.7 40.4 41.0 41.6 42.0 42.4 42.6 42.7 42.8 42.8 46.5 47.1 47.5 47.8 GE 3000 22.7 23.2 31.3 34.0 39.7 41.5 44.0 45.8 48.1 48.2 48.3 48.3 GE 2500 25.2 25.7 34.2 36.9 42.7 44.5 47.0 48.8 49.6 50.2 50.6 51.0 51.2 51.3 51.4 51.4 GE 2000 29.8 54.5 55.3 55.9 56.3 52.0 29.2 38.6 41.5 47.R 49.9 52.7 56.8 57.1 57.2 57.2 GE 1800 31.3 31.8 40.9 43.8 50.3 52.4 55,2 57.1 57.8 58.5 58.9 59.4 59.6 59.7 59.8 59.8 GE 1500 35.6 36.2 45.9 48.9 56.7 58.9 61.7 63.9 64.6 65.5 66.1 66.6 66.8 66.9 67.0 67.0 GE 1200 37.7 38.4 48.9 52.3 60.8 63.7 66.5 68.8 69.6 70.4 71.2 71.6 71.8 71.9 72.0 72.0 GE 40.1 67.7 77.1 77.2 1000 39.4 51.8 55.3 71.2 74.0 74.7 75.6 76.3 76.8 77.0 77.2 64.6 GE 900 39.9 40.6 52.8 56.2 65.7 68.8 72.3 75.1 75.9 76.8 77.5 78.0 78.2 78.3 78.4 78.4 800 40.6 41.4 54.2 57.7 67.8 71.1 74.6 77.6 78.8 79.7 80.4 80.9 81.1 81.2 81.3 81.3 GE 700 41.7 42.7 77.4 80.4 81.7 84.0 84.4 56.3 60.1 70.4 73.8 82.7 84.7 R4.R 84.9 84.9 GΕ 600 42.2 43.1 57.5 61.5 72.6 76.3 80.2 83.2 84.5 85.7 87.0 87.5 87.8 88.0 88.1 88.1 GΕ 500 42.2 43.1 58.1 62.3 74.0 78.1 82.5 85.9 87.2 88.5 90.1 90.6 91.1 91.3 91.4 91.4 GE 400 42.6 43.5 58.6 63.1 75.4 79.7 84.5 88.4 89.8 91.2 92.9 93.4 94.0 94.2 94.3 94.4 GR 300 42.6 43.5 58.7 63.2 75.5 79.8 84.8 88.7 90.1 91.6 93.7 94.2 94.7 94.9 95.1 95.5 GE 42.6 43.5 58.7 63.2 75.5 79.8 84.8 88.7 90.1 91.8 94.2 95.1 95.8 96.2 96.5 97.3 GE 42.6 43.5 88.7 90.2 94.6 95.9 97.6 99.9 100 58.7 63.2 75.5 79.8 84.8 92.3 97.0 98.8 GE 000 42.6 43.5 58.7 63.2 75.5 79.8 84.8 88.7 90.2 92.3 94.6 95.9 97.0 97.6 98.8 100.0

TOTAL NUMBER OF OBSERVATIONS 930

D - 2 - 22

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: MAR HOURS: 12-14

				LST	TO UTC	: - 1					MONTH:	MAR	HOURS:	12-14			
CEI	LING	•••••	• • • • • • •	• • • • • •	• • • • • • •	••••••	VISIBIL	ITY IN I	METERS	• • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	•••••
I	N	GE	GE.	GE	GE	GE	GE	GE	GE.	GE	Œ	GE	Œ	GE	GE	GE	Œ
FE	BT	112	90	80	60	48	40	32	24	20	16	12	10	80	06	04	00
• • • •	• • • • •			• • • • • • •	• • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • •	• • • • • •			• • • • • • •		• • • • • •
NO (CEIL	16.0	16.2	21.5	23.0	24.7	25.7	25.9	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2
		10.7		05.0	06.0		20.6	24 2	21.5	31 6		34 6	34.6	31.6	34.6	31 6	34.6
	20000 18000	18.7 18.7	18.9 18.9	25.2 25.3	26.8 26.9	29.2 29.4	30.6 30.8	31.3 31.4	31.6 31.7	31.6 31.7	31.6 31.7	31.6 31.7	31.6 31.7	31.6 31.7	31.6 31.7	31.6 31.7	31.6 31.7
	16000	18.7	18.9	25.3	26.9	29.4	30.8	31.4	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7
	14000	18.8	19.0	25.4	27.0	29.5	30.9	31.5	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8
	12000	18.9	19.1	25.5	27.1	29.6	31.0	31.8	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2
-		20.5		23.3		23.0	51.0	32.0	32.2		32.12	32.12	32.0	32.12	32.2	32.12	55.5
GE :	10000	20.0	20.2	26.6	28.3	30.8	32.2	33.0	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
Œ	9000	20.1	20.4	26.8	28.8	31.3	32.8	33.7	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
Œ	8000	20.5	20.9	27.5	29.6	32.5	34.4	35.4	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8
Œ	7000	20.5	20.9	27.5	29.6	32.7	34.6	35.6	36.1	36.2	36.3	36.3	36.3	36.3	36.3	36.3	36.3
Œ	6000	20.5	20.9	27.5	29.6	32.7	34.6	35.6	36.1	36.2	36.3	36.3	36.3	36.3	36.3	36.3	36.3
GE	5000	21.0	21.3	28.3	30.3	33.7	35.8	36.8	37.3	37.4	37.5	37.5	37.5	37.5	37.5	37.5	37.5
GE	4500	22.0	22.4	29.4	31.4	34.7	36.9	37.8	38.4	38.5	38.6	38.6	38.6	38.6	38.6	38.6	38.6
GE	4000	23.0	23.3	30.4	32.5	35.8	38.0	38.9	39.5	39.6	39.7	39.7	39.7	39.7	39.7	39.7	39.7
GE	3500	27.8	28.4	35.6	37.6	41.1	43.2	44.2	44.7	44.8	44.9	44.9	44.9	44.9	44.9	44.9	44.9
GE	3000	34.6	35.2	43.3	45.6	49.4	51.6	52.6	53.1	53.2	53.3	53.3	53.3	53.3	53.3	53.3	53.3
Œ	2500	40.0	40.8	49.2	51.6	55.6	57.8	58.8	59.4	59.5	59.6	59.6	59.6	59.6	59.6	59.6	59.6
Œ	2000	46.5	47.4	57.0	59.5	63.5	65.8	66.8	67.3	67.4	67.5	67.5	67.5	67.5	67.5	67.5	67.5
GE	1800	48.4	49.6	59.6	62.0	66.1	68.4	69.5	70.0	70.1	70.2	70.2	70.2	70.2	70.2	70.2	70.2
GE	1500	52.6	53.8	64.7	67.7	72.5	74.9	76.3	76.9	77.2	77.3	77.3	77.4	77.4	77.4	77.4	77.4
GE	1200	54.8	56.3	68.5	71.7	77.4	80.3	81.9	82.6	82.9	83.2	83.2	83.3	83.3	83.3	83.3	83.3
Œ	1000	56.3	57.8	71.3	74.6	81.0	84.0	85.6	86.8	87.1	87.5	87.5	87.6	87.6	87.6	87.6	87.6
GE	900	57.4	59.1	72.9	76.2	82.7	85.7	87.4	88.6	88.9	89.4	89.5	89.6	89.6	89.6	89.6	89.6
GE	800	57.7	59.5	73.3	76.8	83.4	86.5	88.2	89.5	89.8	90.2	90.3	90.4	90.4	90.4	90.4	90.4
Œ	700	58.5	60.2	74.8	78.4	85.5	88.6	90.3	91.6	91.9	92.5	92.7	92.8	92.8	92.8	92.8	92.8
GE	600	58.9	60.8	75.8	79.4	86.7	90.0	91.7	93.0	93.4	94.0	94.3	94.4	94.4	94.4	94.4	94.4
GE	500	59.1	61.0	76.3	80.1	87.6	91.2	93.2	94.8	95.3	95.9	96.6	96.7	96.7	96.7	96.7	96.7
GE	400	59.2	61.1	76.8	80.5	88.3	91.9	94.0	95.8	96.2	96.9	97.5	97.6	97.6	97.6	97.6	97.7
GE	300	59.2	61.1	76.8	80.5	88.4	92.2	94.4	96.5	96.9	97.6	98.3	98.5	98.5	98.5	98.5	98.6
GE	200	59.2	61.1	76.8	80.5	88.4	92.2	94.4	96.5	96.9	97.6	98.4	98.6	98.6	98.9	99.0	99.2
GE	100	59.2	61.1	76.8	80.5	88.4	92.2	94.4	96.5	96.9	97.7	98.6	98.9	98.9	99.6	99.7	99.9
GE	000	59.2	61.1	76.8	80.5	88.4	92.2	94.4	96.5	06.0	97.7	98.6	98.9	98.9	99.6	99.7	100.0
GB.	000	39.2	01.1	/0.8	50.5	00.4	94.2	94.4	90.5	96.9	9/./	90.0	90.9	90.9	99.0	99./	100.0
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PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: MAR HOURS: 15-17

				LST	TO UTC	: - 1					MONTH:	man :	BUUKB:	15-17			
CEILI	ING	•••••	• • • • • • •	• • • • • • •	•••••	• • • • • • • • • • • • • • • • • • • •	VISIBIL	ITY IN	METERS		••••	• • • • • •	• • • • • •	•••••	•••••	• • • • • •	•••••
IN	- 1	GE.	GR	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	Œ	GE	Œ	GE
PEE	r	112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
	• • • • •								• • • • • •		• • • • • •					<i></i>	
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NO CE	IIL	20.3	20.9	26.8	27.7	28.7	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9
GE 20	0000	24.2	24.8	31.6	32.6	33.5	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8
GE 18		24.4	25.1	31.8	32.8	33.8	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
GE 16		24.4	25.1	31.8	32.8	33.8	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
GE 14	,	24.4	25.1	32.0	33.0	34.0	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
GE 12	2000	24.8	25.5	32.5	33.4	34.4	34.6	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7
GE 10	0000	26.0	26.7	33.7	34.6	35.7	35.9	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0
GE 9	9000	26.2	26.9	34.0	34.9	36.0	36.2	36.3	36.3	36.3	36.3	36.3	36.3	36.3	36.3	36.3	36.3
GE 8	3000	27.8	28.5	36.1	37.4	38.8	39.2	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6
GE 7	7000	28.1	28.7	36.5	37.8	39.6	40.2	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5
GE 6	5000	28.1	28.7	36.5	38.0	39.8	40.4	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8
GE 5	5000	28.3	29.0	36.9	38.4	40.2	40.9	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2
GE 4	1500	29.0	29.8	38.0	39.5	41.3	41.9	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3
GB 4	1000	31.4	32.2	40.4	42.2	44.1	44.7	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1
GE 3	3500	35.7	36.5	45.3	47.0	48.9	49.6	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9
GE 3	3000	42.5	43.5	53.8	55.5	57.5	58.3	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6
	2500	49.8	51.3	61.6	63.4	65.7	66.6	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0
GE 2	2000	55.9	57.7	68.5	70.4	73.1	74.1	74.7	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
GE 1	1800	57.4	59.2	70.1	72.0	74.7	75.8	76.6	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
GE 1	1500	62.2	64.1	76.0	78.0	81.0	82.4	83.3	83.7	83.7	83.7	83.8	83.8	83.8	83.8	83.8	83.8
GE 1	1200	64.5	66.6	79.6	81.5	85.1	86.8	88.0	88.3	88.3	88.3	88.4	88.4	88.4	88.4	88.4	88.4
OB 1		ee 0	60 1	02.0	04.3	00.3	00.0	01 5	01.0	01.0	02.0	02.2	02.2	92.2	02.2	02.2	02.2
GE 1	1000	65.9	68.1	82.0	84.3	88.3	90.2	91.5	91.9	91.9	92.0 92.7	92.2 92.8	92.2 92.8		92.2 92.8	92.2	92.2 92.8
	900	66.1 66.2	68.3	82.6 83.2	84.8	88.9 89.6	90.9	92.2	92.6	92.6 93.2	93.3	93.7	93.7	92.8 93.7	92.8	92.8 93.7	92.8
GE GE	700	66.5	68.5	83.9	85.5 86.1		91.5 92.6	92.8 93.9	93.2	93.2	93.3	93.7	94.9	94.9	94.9	94.9	
GE	600		68.7			90.4			94.4			96.1	96.1	96.1			94.9 96.2
GB	800	66.9	69.1	84.6	87.0	91.3	93.5	94.8	95.5	95.5	95.6	90.1	90.1	90.1	96.2	96.2	90.2
GE	500	67.0	69.2	85.2	87.6	92.2	94.5	95.8	96.6	96.6	97.0	97.5	97.5	97.5	97.6	97.6	97.6
GE	400	67.1	69.4	85.5	88.0	92.6	94.9	96.2	97.2	97.3	97.8	98.5	98.6	98.6	98.7	98.7	99.0
GE	300	67.1	69.4	85.5	88.0	92.6	94.9	96.2	97.3	97.4	98.0	98.7	98.8	98.8	98.9	98.9	99.2
GE	200	67.1	69.4	85.5	88.0	92.6	94.9	96.2	97.3	97.4	98.1	98.8	98.9	99.0	99.1	99.1	99.7
GE	100	67.1	69.4	85.5	88.0	92.6	94.9	96.2	97.3	97.4	98.1	98.8	98.9	99.0	99.5	99.5	100.0
95	100	3,.1	03.4	03.3	00.0	32.0	24.3	30.4	31.3	24	30.1	20.0	30.3	22.0	33.3	33.3	100.0
GE	000	67.1	69.4	85.5	88.0	92.6	94.9	96.2	97.3	97.4	98.1	98.8	98.9	99.0	99.5	99.5	100.0
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PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: MAR HOURS: 18-20

			LST	TO UTC	: - 1					MONTH:	MAR	Hours:	18-20			
CEILING		•••••	• • • • • • •	• • • • • • •		VISIBIL:	ITY IN	METERS	• • • • • •	• • • • • • •	•••••	• • • • • • •		• • • • • • •	• • • • • •	• • • • • •
IN	GE	Œ	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE
FEET	112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
•••••		• • • • • • •	• • • • • • •	• • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • • •		• • • • • • •	• • • • • • •	• • • • • •
NO CRIL	25.8	26.0	30.5	31.4	32.8	33.0	33.4	33.5	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7
LLES ON	23.0	20.0	30.3	31.4	32.0	33.0	33.4	33.3	33.7	33.7	33.,	33.7	33.1	33.7	33.7	33.7
GE 2000	29.3	29.6	34.8	35.8	37.2	37.5	37.9	38.1	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4
GE 1800	29.7	30.0	35.2	36.3	37.7	37.9	38.3	38.5	38.9	38.9	38.9	38.9	38.9	38.9	38.9	38.9
GE 16000	29.7	30.0	35.2	36.3	37.7	37.9	38.3	38.5	38.9	38.9	38.9	38.9	38.9	38.9	38.9	38.9
GE 14000	29.9	30.2	35.7	36.8	38.2	38.4	38.9	39.1	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4
GE 1200	30.1	30.5	36.0	37.0	38.4	38.6	39.1	39.3	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6
GE 1000	31.9	32.2	37.7	38.9	40.4	40.6	41.0	41.2	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6
GE 900		32.9	38.5	39.8	41.3	41.6	42.0	42.2	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5
GE 800		35.4	41.7	43.2	44.7	45.1	45.9	46.1	46.4	46.4	46.4	46.4	46.4	46.4	46.4	46.4
GE 700		36.6	42.9	44.6	46.4	46.8	47.8	48.0	48.3	48.3	48.3	48.3	48.3	48.3	48.3	48.3
GB 600		36.6	42.9	44.6	46.4	46.8	47.8	48.0	48.3	48.3	48.3	48.3	48.3	48.3	48.3	48.3
								•								
GE 500	36.8	37.2	43.6	45.2	47.0	47.5	48.4	48.7	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
GE 450	39.4	39.8	46.5	48.1	49.9	50.4	51.3	51.6	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9
GE 400	41.2	41.7	48.3	50.1	51.9	52.3	53.3	53.5	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8
GE 350	46.4	46.8	54.0	55.9	57.9	58.3	59.3	59.5	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8
GE 300	53.2	53.9	62.0	64.2	66.6	67.1	68.0	68.2	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
GE 250		57.8	66.2	68.4	71.4	71.8	72.8	73.0	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3
GE 200	L	63.4	73.2	75.5	78.6	79.0	80.0	80.2	80.5	80.6	80.6	80.6	80.6	80.6	80.6	80.6
GE 180		64.0	74.1	76.3	79.5	80.0	80.9	81.2	81.5	81.6	81.6	81.6	81.6	81.6	81.6	81.6
GE 1500		65.9	77.1	79.3	82.7	83.2	84.2	84.6	84.9	85.0	85.1	85.1	85.1	85.1	85.1	85.1
GE 120	66.4	67.7	80.1	82.5	85.9	86.8	88.2	88.8	89.1	89.2	89.3	89.3	89.3	89.3	89.3	89.3
GE 100	67.4	68.8	81.7	84.1	87.8	88.7	90.1	90.7	91.1	91.2	91.3	91.3	91.3	91.3	91.3	91.3
GE 90	67.4	68.8	81.8	84.2	88.1	88.9	90.3	91.0	91.3	91.4	91.5	91.5	91.5	91.5	91.5	91.5
GE 80	67.8	69.2	83.0	85.4	89.5	90.3	91.7	92.4	92.7	92.8	93.0	93.0	93.0	93.0	93.0	93.0
GE 70	67.8	69.2	83.6	86.0	90.2	91.1	92.5	93.1	93.4	93.8	94.2	94.2	94.2	94.2	94.2	94.2
GE 60	68.0	69.4	84.5	87.1	91.7	92.6	94.0	94.7	95.0	95.5	96.2	96.3	96.3	96.3	96.3	96.3
to																
GE 500		69.6	85.1	87.7	92.4	93.2	95.2	95.9	96.2	96.8	97.6	97.7	97.7	97.7	97.7	97.7
GE 400		69.6	85.1	87.7	92.4	93.2	95.2	95.9	96.2	97.1	98.0	98.3	98.5	98.5	98.6	98.8
GE 20		69.6	85.1	87.7	92.4	93.3	95.3	96.0	96.4	97.3	98.2	98.5	98.7	98.7	98.8	99.0
GE 200		69.6 69.6	85.1	87.7	92.4	93.3	95.3	96.0	96.4	97.4	98.3	98.7	99.4	99.5	99.6	99.9
GE 10	08.2	09.0	85.1	87.7	92.4	9 3.3	95.3	96.0	96.4	97.4	98.3	98.7	99.4	99.6	99.7	100.0
GE 00	68.2	69.6	85.1	87.7	92.4	93.3	95.3	96.0	96.4	97.4	98.3	98.7	99.4	99.6	99.7	100.0
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PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY
LST TO UTC: - 1 PERIOD OF RECORD: JAN 80 - DEC 89 MONTH: MAR HOURS: 21-23 CEILING VISIBILITY IN METERS IN Œ GE GE GE GΕ GE GE GE GE GE Œ GE Œ GE GE GE 32 20 FEET 112 90 80 60 48 40 24 12 10 80 06 04 00 16 NO CEIL 29.7 30.2 33.4 34.6 36.3 36.9 37.0 37.2 37.2 37.2 37.2 37.2 37.2 37.2 37.2 37.2 42.6 GE 200001 34.3 34.8 38.5 39.7 41.5 42.0 42.4 42.6 42.6 42.6 42.6 42.6 42.6 42.6 42.6 GE 18000 34.3 34.8 38.5 39.7 41.5 42.0 42.4 42.6 42.6 42.6 42.6 42.6 42.6 42.6 42.6 42.6 GE 16000 34.8 39.7 42.4 42.6 42.6 42.6 42.6 42.6 42.6 42.6 42.6 34.3 38.5 41.5 42.0 42.6 GE 14000 34.3 34.8 38.5 39.7 41.6 42.2 42.5 42.7 42.7 42.7 42.7 42.7 42.7 42.7 42.7 42.7 GE 12000 34.3 34.8 38.5 39.7 41.6 42.2 42.5 42.7 42.7 42.7 42.7 42.7 42.7 42.7 42.7 42.7 GE 10000 35.3 35.8 39.7 40.9 43.3 43.7 43.9 43.9 43.9 43.9 43.9 43.9 43.9 43.9 42.8 43.9 GE 9000 36.2 36.8 40.8 41.9 43.9 44.4 44.7 44.9 44.9 44.9 44.9 44.9 44.9 44.9 44.9 44.9 GE 8000 38.8 39.4 43.5 45.1 47.0 47.5 48.2 48.4 48.4 48.4 48.4 48.4 48.4 48.4 48.4 48.4 GE 7000 49.7 49.9 49.9 49.9 39.7 40.2 44.4 45.9 48.2 48.7 49.9 49.9 49.9 49.9 49.9 49.9 50.0 GR 6000 39.8 40.3 44.5 48.3 48.8 49.8 50.0 50.0 50.0 50.0 50.0 50.0 50.0 50.0 46.0 GE 5000 50.2 50.4 50.4 50.4 50.4 50.4 40.2 40.8 44.9 46.5 48.7 49.2 50.4 50.4 50.4 50.4 4500 43.0 53.2 53.2 53.2 53 2 CE 43.5 47.7 49.2 51.5 52.0 53.0 53.2 53 2 53.2 53 2 53.2 4000 46.0 50.9 52.4 55.2 56.3 56.6 56.6 56.6 56.6 GE 46.6 54.6 56.6 56.6 56.6 56.6 56.6 GE 3500 50.3 50.9 55.3 59.0 60.8 61.0 61.0 61.0 61.0 61.0 61.0 56.8 59.6 61.0 61.0 61.0 GE 3000 56.5 57.2 62.3 64.4 66.7 67.2 68.4 68.6 68.6 68.6 68.6 68.6 68.6 68.6 68.6 68.6 GE 2500 58.1 58.8 64.4 66.8 69.6 70.1 71.5 71.7 71.7 71.7 71.7 71.7 71.7 71.7 71.7 71.7 GE 2000 62.9 70.3 72.7 75.7 78.0 63.9 76.2 77.6 77.8 78.0 78.0 78.0 78.0 78.0 78.0 78.0 GE 1800 64.1 77.0 77.5 78,9 79.1 79.2 79.2 79.2 65.1 71.5 74.0 79.2 79.2 79.2 79.2 79.2 GE 1500 66.5 67.4 74.2 76.7 79.8 80.5 82.0 82.3 82.4 82.5 82.5 82.5 82.5 82.5 82.5 82.5 86.3 GE 1200 69.2 70.2 77.5 80.1 83.2 84.2 85,8 86.0 86.1 86.3 86.3 86.3 86.3 86.3 86.3 GE 1000 71.2 72.2 80.1 82.8 86.2 87.2 88.8 89.0 89.1 89.6 89.6 89.6 89.6 89.6 89.6 89.6 GE 900 72.7 80.9 83.8 87.3 90.1 90.2 90.6 90.8 90.8 90.8 90.8 71.7 88.3 89.9 90.8 90.8 91.2 GR anal 71.9 72.9 81.6 84.5 88.2 89.1 90.9 91.1 91.7 91.8 91.8 91.8 91.8 91.8 91.8 92.0 GE 700 72.6 73.5 82.4 85.3 89.0 90.0 91.7 91.9 92.7 92.8 92.8 92.8 92.8 92.8 92.8 600 93.2 93.9 72.9 GR 73.9 83.1 86.0 89.8 90.8 92.6 93.1 94.0 94.0 94.0 94.0 94.0 94.0 GE 500 73.1 74.1 83.3 86.2 90.5 93.8 94.4 94.8 95.5 95.6 95.6 95.6 95.6 95.6 91.8 95.6 GE 400 73.3 74.4 84.1 87.0 91.5 93.0 95.1 95.9 96.5 97.6 98.1 98.1 98.1 98.4 98.5 98.5 GE 300 73.3 74.4 84.2 87.1 91.9 93.5 95.8 96.8 97.3 98.5 98.9 98.9 98.9 99.2 99.4 99.4 97.6 99.9 100.0 100.0 GE 200 73.3 74.4 84.2 95.9 97.0 98.8 99.2 99.6 87.1 92.0 93.7 99.6 GE 100 73.3 74.4 84.2 87.1 92.0 93.7 95.9 97.0 97.6 98.8 99.2 99.6 99.6 99.9 100.0 100.0 GE 000 73.3 74.4 84.2 87.1 92.0 93.7 95.9 97.0 97.6 98.8 99.2 99.6 99.6 99.9 100.0 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: MAR HOURS: ALL CRILING VISIBILITY IN METERS IN GE GE GE Œ GE ge ge GE GE GE GE Œ GE GE GR GE FEET 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 18.8 19.2 24.1 25.0 27.2 27.9 28.4 28.8 29.1 29.3 29.5 29.5 29.6 29.6 29.7 29.7 GE 20000 22.4 22.7 28.4 29.5 32.0 32.9 33.6 34.1 34.3 34.6 34.7 34.8 34.8 34.9 34.9 35.0 GE 18000 22.4 22.8 28.5 29.6 32.1 33.0 33.8 34.2 34.4 34.7 34.9 34.9 35.0 35.0 35.0 35.1 GR 16000 34.2 22.4 22.8 28.5 29.6 32.1 33.0 33.8 34.4 34.7 34.9 34.9 35.0 35.0 35.0 35.1 GR 14000 22.5 22.9 28.6 29.7 32.2 33.1 34.3 34.6 33.9 34.8 35.0 35.0 35.1 35.1 35.2 35.2 GR 12000 22.7 23.0 28.8 29.9 32.5 33.4 34.1 34.5 34.8 35.2 35.0 35.3 35.4 35.4 35.3 35.4 GR 10000 24.0 29.9 31.0 33.7 34.7 35.5 35.9 36.2 36.6 36.7 36.4 36.7 36.8 36.8 36.8 Œ 9000 24.5 24.0 31.7 34.4 35.4 36.7 36.9 37.4 30.4 36.2 37.2 37.4 37.5 37.5 37.6 37.6 Œ 8000 25.5 26.0 32.3 33.7 36.8 37.9 39.1 39.6 39.9 40.1 40.3 40.4 40.5 40.5 40.6 40.6 7000 25.9 26.3 37.4 Œ 32.7 34.1 38.6 39.8 40.4 40.7 41.1 41.2 41.4 40.9 41.3 41.4 41.4 CIR. 6000 25.9 26.3 32.7 34.2 37.4 38.6 39.9 40.4 40.7 41.0 41.2 41.3 41.3 41.4 41.5 41.5 GE 5000 26.4 26.9 33.4 34.8 38.1 39.4 40.6 41.2 41.5 41.7 41.9 42.0 42.1 42.2 42.2 42.2 GR 4500 27.8 28.3 34.9 36.3 39.6 40.9 42.2 42.7 43.0 43.3 43.5 43.6 43.7 43.7 43.8 43.8 Œ 4000 29.7 30.2 37.0 38.6 42.0 43.3 44.6 45.2 46.1 45.6 45.8 46.1 46.2 46.3 46.3 46.4 50.3 50.3 æ 3500 33.1 33.7 40.8 42.4 45.9 47.2 48.5 49.2 49.5 49.8 50.0 50.1 50.2 50.3 GR 3000 38.4 39.1 47.0 48.8 52.6 54.0 55.3 56.1 57.0 57.1 57.3 57.3 56.5 56.7 57.2 57.3 Œ 2500 41.7 42.5 50.9 52.8 56.8 58.2 59.6 60.4 60.8 61.0 61.3 61.4 61.5 61.6 61.6 61.6 59.0 GE 2000 46.7 47.8 56.9 63.3 64.8 66.4 67.2 67.6 67.9 68.2 68.3 68.5 68.4 68.5 68.5 GR 1800 48.1 49.3 58.6 60.7 65.1 66.7 68.3 69.1 69.5 69.8 70.1 70.2 70.3 70.4 70.4 70.4 Œ 1500 51.5 52.7 62.8 65.1 70.0 71.7 73.4 74.4 74.8 75.2 75.5 75.6 75.7 75.8 75.9 75.9 76.0 Œ 1200 54.0 55.2 66.2 68.7 74.0 77.9 79.0 79.4 79.8 80.2 80.3 80.4 80.5 80.6 80.6 Œ 1000 55.6 56.9 68.8 71.5 77.3 79.4 81.4 82.7 83.2 83.7 84.1 84.2 84.3 84.4 84.4 84.4 57.7 GR 900 56.4 70.0 72.7 78.6 80.8 82.9 84.2 84.7 85.2 85.6 85.7 85.8 85.9 86.0 86.0 Œ 800 56.9 58.3 70.9 73.7 79.8 82.0 84.2 85.6 86.1 86.7 87.1 87.2 87.3 87.4 87.5 87.5 GR 700 57.7 59.1 72.3 75.2 81.5 83.8 86.0 89.3 89.4 87.5 88.0 88.7 89.5 89.7 89.7 89.7 Œ 600 58.1 59.5 73.2 76.2 82.8 85.3 87.6 89.2 89.8 90.5 91.1 91.3 91.4 91.6 91.6 91.6 76.8 GR 500 58.3 59.7 73.7 83.9 86.6 89.2 91.1 91.7 92.7 93.5 93.7 93.8 94.0 94.0 94.1 GB 400 58.5 59.9 74.1 77.3 84.7 87.5 90.4 92.5 93.3 94.4 95.4 95.6 95.8 96.0 96.2 96.3 300 58.5 59.9 74.2 77.4 85.0 87.8 93.1 96.2 97.2 Œ 90.9 93.9 95.1 96.6 96.8 97.1 97.4 Œ 200 58.5 59.9 74.2 77.4 85.1 87.9 91.1 93.4 94.2 95.5 96.8 97.5 97.8 98.3 98.6 99.0 GE 100 58.5 59.9 74.2 77.4 85.1 87.9 97.7 91.1 93.4 94.3 95.6 96.9 98.1 98.8 99.4 99.9 59.9 74.2 77.4 85.1 87.9 91.1 93.4 94.3 95.6 96.9 97.7 98.1 98.8 99.4 100.0 GE 000 58.5

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: APR HOURS: 00-02

				LST	TO UTC	: - 1					MONTH:	APR	HOURS:	00-02			
CEILI	 Ing	•••••	• • • • • •	• • • • • • •	• • • • • •	,,,,,,	VISIBIL:	ITY IN I	METERS	• • • • • •	•••••	• • • • • •	• • • • • •	• • • • • • • •	• • • • • •		•••••
IN	- 1	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	Œ	GE
FEET	r	112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
• • • • •	• • • • •												• • • • • •				
Wa 51		40.5	44 -	40.0	42.0	45.0		45.6	45 5	45.0	45.0	45.0	45.0	45.0	45.0	46.0	
NO CI	81T	40.5	41.5	42.8	43.8	45.2	45.2	45.6	45.7	45.9	45.9	45.9	45.9	45.9	45.9	46.2	46.2
GE 20	0000	45.1	46.3	48.6	49.7	51.3	51.4	51.9	52.1	52.3	52.3	52.3	52.3	52.3	52.3	52.5	52.5
GE 18	3000	45.1	46.3	48.6	49.7	51.3	51.4	51.9	52.1	52.3	52.3	52.3	52.3	52.3	52.3	52.5	52.5
GE 16	5000	45.1	46.3	48.6	49.7	51.3	51.4	51.9	52.1	52.3	52.3	52.3	52.3	52.3	52.3	52.5	52.5
GE 14	1000	45.1	46.3	48.6	49.7	51.3	51.4	51.9	52.1	52.3	52.3	52.3	52.3	52.3	52.3	52.5	52.5
GE 12	2000	45.2	46.4	48.7	49.8	51.4	51.5	52.1	52.2	52.4	52.4	52.4	52.4	52.4	52.4	52.6	52.6
GE 10	2000	47.6	48.8	51.4	52.5	54.1	54.2	54.7	54.8	55.1	55.1	55.1	55.1	55.1	55.1	55.3	55.3
	9000	47.9	49.2	51.9	53.3	54.1	55.1	55.6	55.7	56.0	56.0	56.0	56.0	56.0	56.0	56.2	56.2
	3000	50.5	51.7	54.5	55.8	57.6	58.1	58.6	58.7	59.2	59.2	59.2	59.3	59.3	59.3	59.5	59.5
	7000	50.5	51.7	54.6	56.0	57.7	58.2	58.8	59.0	59.4	59.4	59.4	59.5	59.5	59.5	59.7	59.7
	5000	50.7	51.9	54.9	56.3	58.1	58.5	59.2	59.3	59.7	59.7	59.7	59.8	59.8	59.8	60.1	60.1
GE (1000	30.7	31.3	34.3	30.3	30.1	50.5	39.2	39.3	33.7	33.7	33.7	33.0	33.0	39.0	00.1	00.1
GE S	5000	52.7	53.9	57.1	58.4	60.2	60.6	61.3	61.4	61.8	61.8	61.8	62.0	62.0	62.0	62.2	62.2
GE 4	1500	54.5	55.8	59.3	60.7	62.5	63.0	63.6	63.7	64.2	64.2	64.2	64.3	64.3	64.3	64.5	64.5
GE 4	1000	59.1	60.4	64.4	66.1	68.1	68.5	69.2	69.3	69.7	69.7	69.7	69.9	69.9	69.9	70.1	70.1
GE 3	3500	62.3	63.7	68.4	70.3	72.4	73.0	73.6	74.0	74.5	74.5	74.5	74.6	74.6	74.6	74.9	74.9
GE 3	3000	65.0	66.5	71.6	73.5	75.9	76.6	77.3	77.6	78.2	78.2	78.2	78.3	78.3	78.3	78.5	78.5
_	2500	66.6	68.2	74.0	75.9	78.2	79.0	79.6	80.0	80.5	80.5	80.5	80.6	80.6	80.6	80.9	80.9
	2000	68.1	69.7	75.8	77.6	80.2	81.1	81.8	82.1	82.6	82.6	82.6	82.8	82.8	82.8	83.1	83.1
	1800	68.5	70.3	76.4	78.3	81.0	81.9	82.6	83.1	83.6	83.6	83.6	83.8	83.8	83.8	84.1	84.1
	1500	71.1	73.0	79.6	81.5	84.2	85.1	86.0	86.4	87.1	87.1	87.1	87.2	87.2	87.2	87.5	87.5
GE 1	1200	71.6	73.5	80.3	82.2	85.4	86.3	87.2	87.7	88.3	88.3	88.3	88.4	88.4	88.4	88.8	88.8
GE :	1000	73.6	75.6	83.0	84.9	88.7	89.5	90.5	91.1	91.8	91.8	91.8	91.9	91.9	91.9	92.2	92.2
GE	900	73.9	75.9	83.3	85.2	89.0	89.9	91.2	91.8	92.4	92.4	92.4	92.5	92.5	92.5	92.9	92.9
GE	800	74.2	76.2	84.1	86.1	90.0	90.9	92.3	93.0	93.8	94.1	94.1	94.2	94.2	94.2	94.5	94.5
GE	700	74.2	76.2	84.2	86.2	90.1	91.0	92.5	93.2	94.0	94.3	94.3	94.4	94.4	94.4	94.8	94.8
GE	600	74.2	76.2	84.3	86.5	90.5	91.4	93.1	93.8	94.7	95.3	95.3	95.4	95.4	95.4	95.8	95.8
GE	500	74.3	76.3	84.4	86.9	91.0	91.9	94.1	94.8	95.7	96.4	96.6	96.7	96.7	96.7	97.0	97.0
GE	400	74.4	76.4	84.6	87.2	91.3	92.2	94.1	95.2	96.3	97.1	97.2	97.3	97.3	97.3	97.7	97.7
GE	300	74.4	76.4	84.6	87.2	91.3	92.3	95.2	96.1	97.2	98.0	98.1	98.3	98.3	98.3	98.7	98.7
GE	200	74.4	76.4	84.6	87.2	91.3	92.3	95.2	96.1	97.2	98.1	98.2	98.4	98.6	99.6	99.9	99.9
GE	100	74.4	76.4	84.6	87.2	91.3	92.3	95.2	96.1	97.2	98.1	98.2	98.4	98.6	99.6	99.9	99.9
GE	100	, 4.4	,0.4	04.0	07.2	31.3	34.3	33.2	30.1	31.2	30.1	30.2	30.4	30.0	33.0	22.2	22.3
GE	000	74.4	76.4	84.6	87.2	91.3	92.3	95.2	96.1	97.2	98.1	98.2	98.4	98.6	99.7	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 899

D - 2 - 28

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 STATION NUMBER: 106070 LST TO UTC: - 1 MONTH: APR HOURS: 03-05 VISIBILITY IN METERS CRILING IN GK Œ GE Œ GE Œ GE GE GE GE GE Œ GR Œ GE Œ 48 16 FEET 112 90 80 60 40 32 24 20 10 80 06 04 00 12 NO CEIL 32.2 33.0 37.0 37.9 39.4 39.9 40.6 41.3 41.6 41.7 41.7 41.7 41.7 41.7 42.0 42.0 GE 20000 46.8 46.8 46.8 46.8 47.1 34.8 35.6 40.8 41.8 43.8 44.2 45.1 46.3 46.7 46.8 47.1 GE 18000 34.8 35.6 40.8 41.9 43.9 44.3 45.2 46.4 46.8 46.9 46.9 46.9 46.9 46.9 47.2 47.2 GE 16000 34.8 35.6 40.8 41.9 43.9 44.3 45.2 46.4 46.8 46.9 46.9 46.9 46.9 46.9 47.2 47.2 GE 14000 46.9 46.9 47.2 34.8 35.6 40.8 41.9 43.9 44.3 45.2 46.4 46.8 46.9 46.9 46.9 47.2 GE 12000 34.9 35.7 40.9 42.0 44.4 45.3 46.6 46.9 47.0 47.0 47.0 47.0 47.0 44.0 47.3 47.3 GE 10000 36.4 37.2 42.6 43.7 45.7 46.1 47.0 48.2 48.6 48.7 48.7 48.7 48.7 48.7 49.0 49.0 GE 9000 36.9 37.7 43.1 44.3 46.6 47.0 48.0 49.2 49.6 49.7 49.7 49.7 49.7 49.7 50.0 50.0 52.7 Œ 8000 39.8 40.6 46.0 47.2 49.4 50.0 51.0 52.3 52.8 52.8 53.1 53.1 53.1 53.4 53.4 GE 7000 39.8 40.6 46.0 47.2 49.4 50.0 51.2 52.6 52.9 53.1 53.1 53.4 53.4 53.4 53.8 53.8 Œ 6000 40.0 40.8 46.2 47.4 50.2 52.8 53.1 53.3 53.3 53.7 53.7 54.0 49.7 51.4 53.7 54.0 5000 Œ 40.7 41.6 47.4 48.7 50.9 51.4 52.7 54.0 54.3 54.6 54.6 54.9 54.9 54.9 Œ 4500 42.8 43.7 49.7 50.9 53.3 53.9 55.1 56.4 56.8 57.0 57.0 57.3 57.3 57.3 57.7 57.7 Œ 4000 47.9 49.0 55.4 56.7 59.6 60.1 63.1 63.3 63.3 63.7 63.7 61.4 62.8 63.7 64.0 64.0 Œ 3500 67.1 50.0 51.1 58.1 59.6 63.2 63.8 66.4 66.9 67.1 67.4 67.4 67.4 67.8 65.1 67.8 GE 3000 52.7 54.0 61.3 62.8 66.8 67.7 69.2 70.6 71.0 71.2 71.2 71.6 71.6 71.6 71.9 71.9 2500 53.9 69.7 71.2 72.6 73.0 73.2 73.2 73.6 GR 55.2 63.3 64.8 68.8 73.6 73.7 74.1 74.1 GE 2000 57.4 67.3 71.7 72.7 74.2 76.1 76.3 76.4 76.8 76.8 76.9 77.3 56.1 65.8 75.7 77.3 GE 1800 57.6 67.4 69.0 74.7 76.2 78.1 78.3 78.4 78.8 78.8 78.9 79.3 58.9 73.7 77.7 79.3 Œ 1500 59.8 61.1 70.1 71.7 76.3 77.3 79.0 80.6 81.1 81.3 81.6 81.9 81.9 82.0 82.4 82.4 Œ 1200 61.3 62.9 72.0 73.6 78.4 79.7 81.3 82.9 83.4 83.7 83.9 84.2 84.2 84.3 84.8 84.8 Œ 1000 63.2 64.8 74.3 76.1 81.1 82.3 84.4 86.1 86.9 87.2 87.4 87.8 87.8 87.9 88.3 88.3 Œ 65.4 77.2 88.8 89.3 89.4 900 63.9 75.3 83.7 85.9 87.6 88.4 89.0 89.3 89.9 89.9 82.3 Œ 800 54.8 66.3 76.4 78.6 83.8 85.1 87.3 89.2 90.1 90.6 90.8 91.1 91.1 91.2 91.7 91.7 92.6 Œ 700 64.8 66.3 76.7 79.0 84.3 85.8 88.2 90.1 91.0 91.4 91.7 92.0 92.0 92.1 92.6 91.9 93.3 GR 600 64.8 66.3 76.9 79.3 84.9 86.3 89.0 90.9 92.7 92.9 93.2 93.2 93.8 93.8 79.6 Œ 500 64.9 66.4 77.1 85.6 87.1 90.1 92.1 94.2 94.4 94.8 94.8 94.9 95.3 93.1 95.3 GR 400 65.0 66.6 77.3 79.9 86.4 88.1 91.3 93.3 94.3 95.8 96.0 96.3 96.3 96.4 96.9 96.9 Œ 300 65.0 66.6 77.4 80.0 86.7 88.4 91.7 94.2 95.2 97.0 97.2 97.9 97.9 98.0 98.4 98.4 Œ 65.0 66.6 80.0 88.6 97.3 98.6 98.8 98.9 99.3 200 77.4 86.7 91.9 94.6 95.6 97.8 99.4 Œ 100 65.0 66.6 77.4 80.0 86.7 88.6 91.9 94.6 95.6 97.3 97.9 98.7 98.9 99.0 99.8 100.0 GE 000 65.0 66.6 77.4 80.0 86.7 88.6 91.9 94.6 95.6 97.3 97.9 98.7 98.9 99.0 99.8 100.0

TOTAL NUMBER OF OBSERVATIONS 900

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: APR HOURS: 06-08 VISIBILITY IN METERS CEILING IN GE GE Œ GE Œ GE GE GE GE GR GR GR GR GR GR GE 48 112 90 80 60 40 32 24 20 16 12 10 80 06 04 00 32.2 33.8 34.3 34.7 35.1 35.6 35.9 35.9 NO CEIL 23.0 23.1 28.7 29.8 35.9 36.0 36.3 36.6 39.1 39.9 40.6 GE 20000 26.0 26.1 32.1 33.6 36.4 38.4 39.4 41.0 41.1 41.1 41.3 41.7 42.0 GE 18000 26.1 36.6 38.6 39.2 39.6 40.0 40.7 41.1 41.2 41.2 41.4 42.1 26.0 32.1 33.6 41.8 GR 16000 26.0 26.1 32.1 33.6 36.6 38.6 39.2 39.6 40.0 40.7 41.1 41.2 41.2 41.4 41.8 42.1 GE 14000 26.0 26.1 32.1 33.6 36.6 38.6 39.2 39.6 40.0 40.7 41.1 41.2 41.2 41.4 41.8 42.1 41.9 42.2 26.0 26.1 36.7 38.7 **GE 12000** 32.2 33.7 39.3 39.7 40.1 40.8 41.2 41.3 41.3 41.6 GE 10000 27.6 27.8 38.7 41.3 41.7 42.8 43.3 34.2 35.7 40.7 42.1 43.2 43.3 43.6 43.9 44.2 GR 9000 28.2 28.4 35.2 36.7 39.8 41.9 42.6 43.1 43.7 44.3 44.8 44.9 44.9 45.1 45.4 45.8 GE 8000 31.0 31.2 39.0 40.8 44.0 46.1 46.9 47.4 48.0 48.7 49.1 49.2 49.2 49.7 50.0 50.6 50.3 GR 7000 31.7 31.9 39.8 41.6 44.9 47.1 47.9 48.6 49.1 49.8 50.2 50.3 50 B 51.1 51.7 GE 6000 31.9 32.1 40.0 41.8 45.1 47.3 48.1 48.8 49.3 50.0 50.4 50.6 50.6 51.0 51.3 51.9 GE 5000 32.6 32.8 40.9 42.7 46.0 48.2 49.0 49.7 50.2 50.9 51.3 51.4 51.4 51.9 52.2 52.8 GE 4500 33.9 34.2 42.7 44.4 47.8 50.1 50.9 51.6 52.1 52.8 53.2 53.3 53.3 54.0 54.4 55.0 GR 4000 36.1 36.4 46.0 48.0 51.6 53.9 54.7 55.7 56.3 57.0 57.4 57.7 57.7 58.6 59.0 59.6 GE 3500 37.6 37.9 48.2 50.3 55.3 58.0 59.1 60.1 60.8 61.4 61.9 62.1 62.1 63.0 63.4 64.0 57.4 60.1 61.6 63.3 64.1 64.7 GE 3000 39.2 39.6 50.2 52.3 62.6 64.9 64.9 65.8 66.2 66.8 GE 2500 40.1 40.4 51.4 53.7 58.9 61.8 63.3 64.4 65.3 66.3 66.9 67.1 67.1 68.0 68.4 69.0 GE 2000 42.2 42.7 54.6 56.9 62.2 65.2 66.8 67.9 68.8 69.8 70.6 70.8 70.8 71.7 72.1 72.7 70.9 72.0 73.0 GE 1800 43.7 44.2 56.2 58.6 63.9 66.9 68.4 69.8 72.8 73.0 73.9 74.3 74.9 GE 1500 45.8 58.8 61.2 67.0 73.8 75.1 76.3 77.2 77.4 78.3 78.8 79.3 45.2 70.3 72.0 77.4 **GE 1200** 48.3 62.0 70.9 78.1 79.4 80.7 81.8 47.8 64.7 74.7 76.3 81.6 81.8 82.7 83.1 83.7 GE 1000 48.3 48.9 63.6 66.3 73.1 77.0 78.9 80.8 82.1 83.4 84.3 84.8 84.8 85.7 86.1 86.7 49.3 74.3 86.2 GE 900 48.8 64.7 67.6 78.3 80.3 82.2 83.6 84.9 85.8 86.2 87.1 87.6 89.3 GE 800 49.3 49.9 65.7 75.4 79.6 81.6 83.6 85.0 87.4 87.9 88.0 88.9 68.6 86.6 89.9 GE 700 49.9 50.4 66.4 69.6 77.0 81.4 83.7 85.8 87.2 88.9 89.8 90.2 90.3 91.2 91.7 92.2 93.6 94.1 600 90.6 92.1 GE 49.9 50.4 66.7 69.9 78.1 82.7 87.0 88.6 91.4 92.2 93.1 84.9 78.7 Œ 500 49.9 50.4 66.8 70.0 83.2 85.7 88.0 89.7 92.0 92.9 93.6 93.7 94.6 95.0 95.6 95.9 96.4 49.9 50.4 79.1 92.8 93.7 94.3 95.4 GE 400 66.8 70.0 83.7 86.3 88.7 90.4 94.6 GE 300 i 49.9 50.4 66.8 70.0 79.1 83.7 86.4 88.9 90.8 93.4 94.4 95.2 95.4 96.3 96.8 97.3 GE 200 49.9 50.4 66.8 70.0 79.1 83.7 86.4 88.9 91.1 93.9 95.2 96.0 96.3 97.2 97.8 98.8 GR 100 49.9 50.4 66.8 70.0 79.1 83.7 86.4 88.9 91.2 94.0 95.3 96.1 96.4 97.4 98.2 100.0 000 49.9 50.4 66.8 70.0 79.1 83.7 86.4 88.9 91.2 94.0 95.3 96.1 96.4 97.4 98.2 100.0 GE

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: APR HOURS: 09-11 VISIBILITY IN METERS CEILING GE GR GR GR GR GE GE GR GE GR IN Œ GR GE Œ GR Œ PEET 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 24.8 26.0 34.6 34.6 34.6 34.6 34.6 31.3 32.7 34.1 34.6 34.6 34.6 34.6 34.6 34.6 GR 20000 27.9 29.1 35.6 37.0 38.4 38.9 39.2 39.8 39.8 39.8 39.8 39.R 39.9 39.9 40.0 40.0 39.8 39.8 GE 18000 27.9 29.1 35.6 37.0 38.4 38.9 39.2 39.8 39.8 39.8 39.9 39.9 40.0 40.0 37.0 39.8 GR 16000 27.9 35.6 39.8 39.8 39.8 39.8 39.9 40.0 40.0 29.1 38.4 38.9 39.2 39.9 GE 14000 27.9 29.1 35.6 37.0 38.9 39.2 39.8 39.8 39.8 39.8 39.8 39.9 39.9 40.0 40.0 38.4 GE 12000 28.3 29.6 36.0 37.4 38.9 39.3 40.2 40.2 40.2 40.2 40.2 40.3 40.3 40.4 39.7 40.4 GE 10000 30.7 32.0 39.0 40.4 42.0 42.4 42.8 43.3 43.3 43.6 43.6 43.6 43.7 43.8 43.9 9000 41.2 39.8 44.4 GR 31.3 32.B 42.8 43.2 43.6 44.2 44.2 44.4 44.4 44.6 44.7 44.8 44.8 Œ 8000 33.7 35.1 42.7 44.3 45.9 46.7 47.0 47.7 47.7 47.9 48.0 48.0 48.1 48.3 48.4 48.4 Œ 7000 34.0 35.6 43.3 45.0 47.3 47.8 48.4 48.4 48.7 48.8 48.8 48.9 49.1 49.2 49.2 46.6 6000 34.2 35.8 45.2 48.7 48.7 48.9 49.0 49.0 49.1 Œ 43.6 46.8 47.6 48.0 49.3 49.4 49.4 49.6 Œ 5000 34.7 45.9 47.4 48.2 49.3 49.3 49.7 49.7 49.8 50.0 50.1 36.2 44.2 48.7 50.1 Œ 4500 35.4 37.0 45.0 46.7 48.2 49.0 49.4 50.1 50.1 50.3 50.4 50.4 50.6 50.8 50.9 50.9 Œ 4000 38.6 40.1 48.2 49.9 51.4 52.4 52.9 53.6 53.6 53.8 53.9 53.9 54.0 54.2 54.3 54.3 57.1 57.3 GR 3500 41.1 42.7 51.3 53.1 54.9 56.0 56.4 57.1 57.4 57.4 57.6 57.8 57.9 57.9 Œ 3000 47.2 48.8 57.9 60.1 62.1 63.4 63.9 64.6 64.8 65.0 65.1 65.1 65.2 65.4 65.6 Œ 2500 49.1 50.7 59.8 62.0 64.3 65.7 66.1 66.8 67.1 67.3 67.4 67.4 67.7 67.9 68.0 68.0 Œ 2000 53.1 54.7 65.1 67.7 70.3 71.8 72.2 73.0 73.3 73.6 73.7 73.7 73.9 74.1 74.2 74.2 66.3 68.9 75.1 75.6 1800 54.2 75.0 GR 55.9 71.8 73.2 73.7 74.4 74.8 75.1 75.3 75.7 75.7 Œ 1500 58.2 59.9 71.4 74.2 77.6 79.4 79.9 80.7 81.1 81.3 81.4 81.4 81.7 81.9 82.0 82.0 1200 60.8 77.3 83.2 85.1 85.2 85.2 85.4 Œ 62.7 74.2 81.2 83.7 84.4 84.9 85.7 85.8 85.8 GR 1000 62.4 64.4 76.8 79.9 84.3 86.7 87.1 88.0 88.4 88.9 89.0 89.0 89.2 89.4 89.6 89.6 85.4 91.4 900 65.0 77.7 80.9 88.0 89.7 90.4 90.9 91.0 91.0 Œ 63.0 88.6 91.2 91.6 91.6 Œ 800 63.2 65.2 78.0 81.7 86.2 89.0 89.8 91.2 92.0 92.4 92.7 92.7 92.9 93.1 93.2 93.2 Œ 700 63.6 87.3 93.8 94.2 65.7 79.0 82.8 90.4 91.2 92.9 94.6 94.6 94.9 95.1 95.2 95.2 Œ 600 63.7 65.8 79.6 83.3 88.2 91.4 92.4 94.2 95.3 95.8 96.1 96.1 96.4 96.7 96.8 96.8 GR 97.0 97.3 97.9 500 63.7 65.8 79.8 83.7 88.7 91.9 92.9 94.8 96.2 97.3 97.7 98.0 98.0 63.7 GE 400 65.8 79.8 83.7 88.7 91.9 92.9 94.9 96.3 97.1 97.6 97.6 97.9 98.1 98.2 98.2 97.0 97.9 98.4 Œ 300 63.7 65.8 79.8 83.8 88.9 92.2 93.4 95.6 98.4 98.9 99.1 99.2 99.2 GR 200 63.7 65.8 79.8 83.8 88.9 92.2 93.6 95.7 97.1 98.0 98.7 98.7 99.2 99.4 99.6 99.8 Œ 100 63.7 65.8 79.8 83.8 88.9 92.2 93.6 95.7 97.1 98.0 98.7 98.7 99.2 99.4 99.7 100.0 Œ 000 63.7 65.8 79.8 83.8 88.9 92.2 93.6 95.7 97.1 98.0 98.7 98.7 99.2 99.4 99.7 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDARLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: APR HOURS: 12-14 CEILING VISIBILITY IN METERS IN GR GR GR GE GE ge ge GE Œ GE GR GE GR GR GE FEET 112 90 04 80 60 48 40 32 24 20 16 12 10 08 06 00 NO CEIL 29.0 29.6 31.3 31.8 31.8 31.9 31.9 31.9 31.9 31.9 31.9 31.9 31.9 31.9 31.9 37.8 38.7 38.7 38.7 38.7 38.7 38.7 38.7 **GE 20000** 34.7 35.3 38.2 38.3 38.3 38.7 38.7 38.7 GE 18000 34.7 35.3 37.8 38.2 38.3 38.3 38.7 38.7 38.7 38.7 38.7 38.7 38.7 38.7 38.7 38.7 GE 16000 38.4 38.6 38.9 38.9 38.9 38.9 38.9 38.9 38.9 38.9 38.9 34.9 35.6 38.0 38.6 38.9 39.0 39.0 GE 14000 34.9 35.6 38.0 38.4 38.6 38.7 39.0 39.0 39.0 39.0 39.0 39.0 39.0 39.0 39.7 39.7 39.7 39.7 39.7 GE 12000 35.6 36.2 38.7 39.1 39.2 39.3 39.7 39.7 39.7 39.7 39.7 GE 10000 37.6 38.7 41.3 41.8 41.9 42.0 42.6 42.7 42.7 42.7 42.7 42.7 42.7 42.7 42.7 42.7 GE 9000 38.1 39.2 42.3 42.4 43.1 43.3 43.3 43.3 43.3 43.3 43.3 43.3 43.3 41.9 42.6 43.3 GE 8000 40.8 42.1 45.1 45.6 45.7 45.9 46.4 46.7 46.7 46.7 46.8 46.8 46.8 46.8 46.8 46.8 47.0 47.4 GE 7000 41.1 42.7 45.7 46.1 46.2 46.4 47.3 47.3 47.3 47.4 47.4 47.4 47.4 47.4 GR 5000 46.1 46.2 47.0 47.3 47.3 47.3 47.4 47.4 47.4 47.4 47.4 41.1 42.7 45.7 46.4 47.4 GR 5000 41.9 46.4 46.9 47.0 47.2 47.8 48.1 48.1 48.1 48.2 48.2 48.2 48.2 48.2 43.4 48.2 GR 4500 47.9 48.3 49.2 49.6 49.6 49.6 49.7 49.7 49.7 49.7 49.7 43.2 44.8 48.4 48.7 49.7 4000 47.9 49.4 52.8 53.2 53.3 54.4 54.4 54.4 54.6 54.6 54.6 GE 53.6 54.1 54.6 54.6 54.6 GR 3500 53.7 58.9 59.3 59.7 60.8 60.8 60.8 60.9 60.9 60.9 60.9 60.9 60.9 55.2 59.9 60.4 GE 3000 62.2 64.0 69.0 69.7 70.0 70.2 70.8 71.1 71.1 71.3 71.4 71.4 71.4 71.4 71.4 71.4 74.4 75.6 75.8 76.7 76.7 76.9 77.0 77.0 77.0 77.0 77.0 GR 2500 66.6 68.8 75.1 76.3 77.0 2000 70.3 72.7 79.1 79.8 80.4 81.2 81.6 81.5 81.8 81.9 81.9 81.9 81.9 81.9 GE 80.7 81.9 GE 1800 80.6 81.9 82.7 83.0 83.0 83.2 83.3 83.3 83.3 83.3 83.3 71.6 74.0 81.2 82.1 83.3 GR 1500 74.0 76.4 83.4 84.1 85.4 85.8 86.3 86.7 86.7 86.9 87.0 87.0 87.0 87.0 87.0 87.0 1200 76.1 78.6 86.8 87.9 89.7 90.1 90.7 91.0 91.0 91.2 91.3 91.3 91.3 91.3 91.3 91.3 GE 1000 77.3 79.8 88.3 89.4 91.4 92.0 92.7 93.1 93.1 93.3 93.4 93.4 93.4 93.4 93.4 93.4 GR 900 77.8 80.3 89.3 90.6 92.6 93.1 94.1 94.7 94.7 94.9 95.1 95.1 95.1 95.1 95.1 95.1 89.4 95.7 77.8 95.2 95.2 95.4 95.7 95.7 95.7 95.7 GE ROOL 80.3 90.9 93.1 93.7 94.7 95.7 GE 700 90.1 92.0 94.7 97.2 97.2 97.4 97.7 97.7 97.7 97.7 97.7 78.2 80.8 95.3 96.3 97.7 90.2 92.1 96.4 97.4 98.0 98.0 97.4 GE 600 78.2 94.8 95.4 97.7 98.0 98.0 98.0 80.8 98.0 GE 500 78.2 80.8 90.8 92.9 95.7 96.3 97.3 98.4 98.4 98.7 99.0 99.0 99.0 99.0 99.0 99.0 GR 400 78.2 80.8 90.8 93.1 95.9 96.6 97.6 98.7 98.7 98.9 99.2 99.2 99.2 99.2 99.2 99.2 GR 300 78.2 80.8 90.8 93.1 95.9 96.6 97.6 98.7 98.9 99.1 99.4 99.4 99.4 99.4 99.6 99.6 78.2 90.8 98.7 99.6 GE 200 80.8 93.1 95.9 96.6 97.6 98.9 99.1 99.6 99.6 99.6 99.9 100.0 GE 100 78.2 80.8 90.8 93.1 95.9 96.6 97.6 98.7 98.9 99.1 99.6 99.6 99.6 99.6 99.9 100.0 GE 000 78.2 80.8 90.8 93.1 95.9 96.6 97.6 98.7 98.9 99.1 99.6 99.6 99.6 99.6 99.9 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: APR HOURS: 15-17

				LST	TO UTC	: - 1					MONTH:	APR	HOURS:	15-17			
CEI	LING	• • • • • • •	•••••	•••••	• • • • • • •	•••••	VISIBIL	ITY IN	METERS	• • • • • •	•••••	• • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • •	•••••
1	n	GE	GE.	GE	GE	GE	GE	GE	GR	GE	GE	GE	GE	GE	GE	GE	GE
PE	et	112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
• • •	•••••	• • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • •	•••••
	CRIL	26.1	26.6	27.8	27.9	27.9	27.9	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1
NO.	CBIL	20.1	20.0	27.0	21.3	27.9	21.9	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
Œ	20000	32.7	33.2	34.4	34.6	34.8	34.8	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1
Œ	18000	32.8	33.3	34.6	34.7	34.9	34.9	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2
Œ	16000	32.8	33.3	34.6	34.7	34.9	34.9	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2
Œ	14000	32.9	33.4	34.7	34.8	35.0	35.0	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3
GR	12000	33.7	34.2	35.6	35.7	35.9	35.9	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2
æ	10000	37.2	37.8	39.1	39.2	39.4	39.6	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
GE	9000	38.7	39.4	40.9	41.0	41.2	41.3	41.8	41.8	41.8	41.6	41.8	41.8	41.8	41.8	41.8	41.8
Œ	8000	42.2	43.0	44.8	45.0	45.2	45.3	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8
Œ	7000	43.1	43.9	45.7	45.9	46.1	46.2	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7
Œ	6000	43.1	43.9	45.7	45.9	46.1	46.2	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7
945	0000	43.1	43.3	43.7	43.3	40.1	40.2	40.7	40.7	40.7	40.7	40.7	40.7		40.7	40.7	40.7
Œ	5000	45.2	46.0	48.0	48.2	48.4	48.6	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.1
Œ	4500	48.1	48.9	50.9	51.1	51.3	51.4	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0
Œ	4000	55.1	56.1	59.0	59.3	59.7	59.8	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3
Œ	3500	62.1	63.2	66.7	67.1	67.6	67.8	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3
Œ	3000	69.4	70.6	74.7	75.1	75.6	75.8	76.3	76.3	76.3	76.7	76.7	76.7	76.7	76.7	76.7	76.7
														•			
Œ	2500	71.9	73.3	77.6	78.0	78.6	79.0	79.6	79.6	79.6	79.9	79.9	79.9	79.9 ,	79.9	79.9	79.9
Œ	2000	74.9		80.9	81.9	82.6	83.0	83.6	83.6	83.6	83.9	83.9	83.9	83.9	83.9	83.9	83.9
Œ	1800	75.7	77.1	82.1	83.1	83.8	84.2	84.8	84.8	84.8	85.1	85.1	85.1	85.1	85.1	85.1	85.1
GE	1500	77.8	79.3	86.1	87.2	88.3	88.8	89.7	89.7	89.7	90.0	90.0	90.0	90.0	90.0	90.0	90.0
GE	1200	80.0	81.6	89.3	90.6	92.0	92.4	93.3	93.3	93.3	93.7	93.7	93.7	93.7	93.7	93.7	93.7
CE	1000	81.0	82.6	90.8	92.0	93.7	94.1	95.4	95.8	95.9	96.2	96.2	96.2	96.2	96.2	96.2	96.2
Œ	900	81.6	83.1	91.7	92.9	94.7	95.1	96.7	97.0	97.1	97.4	97.7	97.7	97.7	97.7	97.7	97.8
Œ	800	81.7	83.2	91.9	93.1	94.9	95.3	97.0	97.3	97.4	97.8	98.0	98.0	98.0	98.0	98.0	98.1
Œ	700	81.8	83.3	92.0	93.2	95.1	95.6	97.2	97.6	97.7	98.1	98.3	98.3	98.3	98.3	98.3	98.4
GE	600	81.8	83.3	92.0	93.3	95.2	95.7	97.4	98.1	98.2	98.7	98.9	98.9	98.9	98.9	98.9	99.0
GB	500	81.9	83.4	92.4	93.8	95.7	96.1	98.1	98.8	98.9	99.3	99.6	99.6	99.6	99.6	99.6	99.7
CE	400	81.9	83.4	92.4	93.8	95.7	96.1	98.1	98.8	98.9	99.3	99.6	99.6	99.6	99.6	99.6	99.7
Œ	300	81.9	83.4	92.4	93.8	95.7	96.1	98.1	98.8	98.9	99.3	99.6	99.6	99.6	99.6	99.6	99.7
GE	200	81.9	83.4	92.6	93.9	95.8	96.2	98.2	98.9	99.0	99.4	99.7	99.7	99.7	99.7	99.7	100.0
Œ	100	81.9	83.4	92.6	93.9	95.8	96.2	98.2	98.9	99.0	99.4	99.7	99.7	99.7	99.7	99.7	100.0
QE.	000	81.9	83.4	92.6	93.9	95.8	96.2	98.2	98.9	99.0	99.4	99.7	99.7	99.7	99.7	99.7	100.0
•••	300		••••	3£.U	,,,,,	9J.0	30 .2	30 .2		,,,, ,,	22. 4		3 3. /	<i>33.1</i>		7 7. /	100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM ROURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: APR HOURS: 18-20 CRILING VISTRILITY IN METERS GE IN Œ GE GE Œ GE GE GE Œ GR GE GR Œ GE GR GE 48 FEET 112 90 80 32 24 20 16 12 10 80 06 04 00 60 40 NO CRIL 34.9 35.8 37.6 37.7 37.8 38.0 38.0 38.0 38.0 38.0 38.0 38.0 38.0 38.0 38.0 38.0 46.6 46.6 46.6 46.6 GE 20000 42.3 43.6 45.7 46.2 46.4 46.6 46.6 46.6 46.6 46.6 46.6 46.1 GE 18000 42.3 43.6 45.7 46.1 46.2 46.4 46.6 46.6 46.6 46.6 46.6 46.6 46.6 46.6 46.6 46.6 GR 16000 42.3 43.6 45.7 46.1 46.2 46.4 46.6 46.6 46.6 46.6 46.6 46.6 46.6 46.6 46.6 46.6 GE 14000 46.2 46.3 46.7 46.7 46.7 46.7 46.7 46.7 46.7 46.7 42.4 43.7 45.8 46.6 46.7 46.7 GE 12000 43.2 44.6 46.7 47.1 47.2 47.4 47.6 47.6 47.6 47.6 47.6 47.6 47.6 47.6 47.6 47.6 GE 10000 46.4 47.8 50.1 50.8 50.9 51.1 51.2 51.2 51.2 51.2 51.2 51.2 51.2 51.2 51.2 51.2 GE 9000 47.0 48.7 51.3 52.0 52.2 52.4 52.7 52.7 52.7 52.7 52.7 52.7 52.7 52.7 52.7 52.7 GE 8000 57.4 57.4 57.4 57.4 57.4 50.8 52.6 55.6 56.3 56.6 57.0 57.4 57.4 57.4 57.4 57.4 GE 7000 52.2 54.0 57.0 57.8 58.2 58.7 59.1 59.1 59.1 59.1 59.1 59.1 59.1 59.1 59.1 59.1 GE 6000 53.2 55.0 58.0 58.8 59.2 59.7 60.1 60.1 60.1 60.1 60.1 60.1 60.1 60.1 60.1 60.1 GE 5000 54.9 56.7 59.9 60.7 61.1 61.6 62.2 62.2 62.2 62.2 62.2 62.2 62.2 62.2 62.2 62.2 GR 4500 57.8 59.6 62.8 63.8 64.2 64.7 65.3 65.3 65.3 65.3 65.3 65.3 65.3 65.3 65.3 65.3 GE 4000 63.8 65.9 69.7 70.7 71.2 71.8 72.4 72.4 72.4 72.4 72.4 72.4 72.4 72.4 72.4 72.4 GE 3500 67.1 69.4 73.3 74.3 74.9 75.6 76.2 76.2 76.2 76.2 76.2 76.2 76.2 76.2 76.2 76.2 GE 3000 72.1 74.7 78.6 79.7 80.3 81.0 81.7 81.8 81.8 82.1 82.3 82.3 82.3 82.3 82.3 82.3 GE 2500 73.4 76.1 80.3 81.6 82.3 83.0 83.8 83.9 83.9 84.2 84.4 84.4 84.4 84.4 84.4 GR 2000 75.4 78.1 82.9 84.4 85.3 86.3 87.1 87.3 87.3 87.7 87.9 87.9 87.9 87.9 87.9 87.9 GE 1800 75.9 78.6 83.3 85.8 87.8 87.8 88.1 88.3 88.3 88.3 84.9 86.8 87.6 88.3 88.3 88.3 GE 1500 76.8 79.4 85.1 86.8 88.0 89.0 89.9 90.1 90.1 90.4 90.7 90.7 90.7 90.7 90.7 90.7 **GE 1200** 77.3 80.0 86.8 88.6 90.0 91.1 92.0 92.2 92.3 92.7 92.9 92.9 92.9 92.9 92.9 92.9 77.9 GE 1000 80.6 87.7 89.4 91.0 92.1 93.2 93.7 93.8 94.2 94.4 94.4 94.4 94.4 94.4 94.4 78.6 88.7 95.3 95.6 95.6 GE 900 81.2 90.4 92.0 93.1 94.2 94.8 94.9 95.6 95.6 95.6 GE 800 78.7 81.3 88.8 90.6 92.4 93.6 94.7 95.2 95.3 95.8 96.0 96.0 96.0 96.0 96.0 96.0 GE 700 78.7 81.3 88.9 90.7 92.7 93.8 94.9 95.6 95.8 96.4 96.7 96.7 96.7 96.7 96.7 96.7 GE 600 78.8 81.4 89.2 91.1 93.1 94.2 95.3 96.0 96.2 97.2 97.4 97.4 97.4 97.4 97.4 97.4 GE 78.8 89.3 94.7 97.0 98.2 98.4 98.4 500 81.4 91.2 93.4 96.0 97.2 98.4 98.4 98.4 97.7 GE 79.0 81.7 89.6 93.7 96.3 97.4 98.7 98.9 99.1 99.1 99.1 99.1 99.1 400 91.4 94.9 GE 300 79.0 81.7 89.6 91.4 93.7 94.9 96.3 97.7 97.9 99.0 99.4 99.7 99.7 99.7 99.7 99.7 GE 200 79.0 81.7 89.6 91.4 93.7 94.9 96.3 97.7 97.9 99.0 99.4 99.7 99.7 99.9 99.9 99.9 CR 100 79.0 81.7 89.5 91.4 93.7 94.9 96.3 97.7 97.9 99.0 99.4 99.8 99.8 100.0 100.0 100.0 GE 000 79.0 81.7 89.6 91.4 93.7 94.9 96.3 97.7 97.9 99.0 99.4 99.8 99.8 100.0 100.0 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: APR HOURS: 21-23 CRILING VISIBILITY IN METERS GE Œ GE GE GE GE GE Œ IN GE GR GE Œ GE GR GR GE 112 90 PEET 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 42.7 43.6 45.7 46.6 46.7 46.8 46.8 46.8 46.8 46.8 46.8 46.8 46.8 46.8 46.8 GB 20000 48.7 49.8 52.0 53.0 53.2 53.3 53.3 53.3 53.3 53.3 53.3 53.3 53.3 53.3 53.3 53.3 GE 18000 48.7 49.8 52.0 53.0 53.2 53.3 53.3 53.3 53.3 53.3 53.3 53.3 53.3 53.3 53.3 53.3 GR 16000 48.7 49.8 52.0 53.0 53.2 53.3 53.3 53.3 53.3 53.3 53.3 53.3 53.3 53.3 53.3 53.3 GE 14000 48.7 53.0 49.8 52.0 53.2 53.3 53.3 53.3 53.3 53.3 53.3 53.3 53.3 53.3 53.3 53.3 GE 12000 49.2 50.3 53.9 53.9 53.9 53.9 53.9 53.9 53.9 53.9 52.6 53.6 53.8 53.9 53.9 53.9 GE 10000 52.4 53.6 55.8 56.8 57.0 57.1 57.1 57.1 57.1 57.1 57.1 57.1 57.1 57.1 57.1 GR 9000 53.4 58.7 54.6 57.2 58.3 58.6 58.7 58.7 58.7 58.7 58.7 58.7 58.7 58.7 58.7 58.7 Œ 8000 56.8 57.9 60.9 62.0 62.2 62.7 62.8 62.8 62.8 62.8 62.8 62.8 62.8 62.8 62.8 62.8 7000 57.4 63.7 63.7 Œ 58.6 61.7 62.8 63.6 63.7 63.7 63.7 63.7 63.7 63.7 63.7 63.1 63.7 Œ 6000 57.8 58.9 62.0 63.1 63.4 63.9 64.0 64.0 64.0 64.0 64.0 64.0 64.0 64.0 64.0 64.0 **GR** 60.7 5000 59.6 63.8 64.9 65.2 65.7 65.8 65.8 65.8 65.8 65.8 65.8 65.8 65.8 65.8 65.R Œ 4500 62.8 64.0 67.2 68.3 68.7 69.1 69.2 69.2 69.2 69.2 69.2 69.2 69.2 69.2 69.2 69.2 4000 Œ 68.1 72.7 73.6 73.6 73.6 73.6 73.6 66.7 71.4 73.0 73.4 73.6 73.6 73.6 73.6 73.6 Œ 3500 70.9 72.6 76.1 77.3 77.8 78.2 78.3 78.4 78.4 78.4 78.4 78.4 78.4 78.4 78.4 78.4 3000 73.9 81.0 Œ 75.7 79.7 82.0 82.2 82.3 82.3 82.4 82.4 82.4 82.4 82.4 81.6 82.1 82.4 GE 2500 75.9 77.7 82.0 83.3 83.9 84.3 84.4 84.6 84.7 84.7 84.8 84.8 84.8 84.8 84.8 84.8 Œ 2000 77.4 79.2 83.7 85.0 85.6 86.2 86.6 86.8 86.8 86.9 86.9 86.9 86.9 86.9 86.9 86.7 1800 Œ 77.7 79.4 83.9 85.2 86.0 86.7 87.0 87.1 87.2 87.2 87.3 87.3 87.3 87.3 87.3 87.3 Œ 1500 79.7 81.4 86.6 87.9 88.7 89.3 89.8 89.9 90.0 90.0 90.1 90.1 90.1 90.1 90.1 90.1 1200 82.2 92.8 GE 80.4 88.2 89.8 90.8 91.7 92.3 92.4 92.7 92.7 92.8 92.8 92.8 92.8 92.8 GR 1000 80.7 82.4 88.8 90.3 91.7 92.6 93.3 93.4 93.8 93.8 93.9 93.9 93.9 93.9 93.9 93.9 Œ 900 82.9 90.8 81.0 89.2 92.2 93.1 93.9 94.0 94.3 94.3 94.4 94.4 94.4 94.4 94.4 94.4 Œ 800 81.1 83.0 89.4 91.0 92.6 93.7 94.7 94.8 95.1 95.4 95.7 95.7 95.7 95.7 95.7 95.7 96.3 Œ 700 81.4 83.3 89.9 91.4 93.0 94.1 95.2 95.4 96.0 96.7 96.7 96.7 96.7 96.7 96.7 Œ 600 81.7 83.6 90.2 91.8 93.4 94.6 95.8 96.2 96.9 97.6 97.9 97.9 97.9 97.9 97.9 97.9 Œ 500 83.6 94.9 96.7 97.3 98.0 98.3 98.3 98.3 81.7 90.2 91.9 93.8 96.1 98.3 98.3 98.3 Œ 400 81.8 83.7 90.3 92.0 93.9 95.0 96.4 97.1 97.9 98.6 99.0 99.0 99.0 99.0 99.0 99.0 Œ 300 83.7 81.8 90.3 92.0 93.9 95.0 97.1 98.7 99.2 99.2 99.2 99.2 96.4 97.9 99.2 99.2 Œ 200 81.8 83.7 90.3 92.0 93.9 95.0 96.4 97.1 97.9 98.9 99.4 99.4 99.4 100.0 100.0 100.0 GE 100 81.8 83.7 90.3 92.0 93.9 95.0 96.4 97.1 97.9 98.9 99.4 99.4 99.4 100.0 100.0 100.0 GE 000 81.8 83.7 90.3 92.0 93.9 95.0 96.4 97.1 97.9 98.9 99.4 99.4 99.4 100.0 100.0 100.0

TOTAL NUMBER OF OBSERVATIONS 900

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: APR HOURS: ALL CE'_ING VISIBILITY IN METERS IN GR GR GE GE GE GE GE GE Œ GE GE GE GE GR GE GE FEET 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 31.6 32.4 36.0 37.2 37.5 37.6 37.7 37.8 37.9 37.9 35.3 36.9 37.9 37.9 38.0 38.0 GR 20000 36.5 37.4 40.9 41.7 42.8 43.2 43.6 43.9 44.0 44.1 44.2 44.2 44.2 44.2 44.4 44.4 **GE 18000** 36.5 37.4 40.9 41.8 42.9 43.3 43.7 44.0 44.1 44.2 44.2 44.2 44.3 44.3 44.4 44.5 44.4 GR 16000 37.4 43.7 44.0 44.1 44.2 44.3 44.3 44.3 36.5 40.9 41.8 42.9 43.3 44.3 44.5 GE 14000 37.4 43.7 44.0 44.1 44.2 44.3 44.3 44.5 36.6 40.9 41.8 42.9 43.3 44.3 44.4 44.5 44.8 GE 12000 37.0 37.9 44.5 44.6 44.7 44.8 45.0 41.4 42.3 43.4 43.8 44.2 44.8 44.8 45.0 **GE 10000** 39.5 40.5 44.2 45.1 46.2 46.6 47.1 47.4 47.6 47.7 47.7 47.7 47.8 48.9 GE 9000 40.2 41.2 46.1 47.3 47.8 48.2 48.6 48.7 48.9 48.9 49.0 49.1 45.2 48.9 49.1 GE 8000 43.2 44.3 48.6 49.6 50.8 51.5 52.0 52.4 52.5 52.6 52.7 52.8 52.8 52.9 53.0 53.1 GE 7000 50.3 51.5 53.2 53.5 53.5 53.6 53.7 53.8 43.7 44.9 49.2 52.2 52.8 53.3 53.6 53.9 GE 6000 44.0 45.1 49.5 50.6 51.8 52.5 53.1 53.5 53.6 53.8 53.8 53.9 53.9 54.0 54.1 54.2 GE 46.4 51.0 52.0 54.6 55.0 55.1 55.3 55.3 55.4 55.5 55.6 5000 45.3 53.3 53.9 55.4 55.7 GR 4500 47.3 48.5 53.2 54.3 55.6 56.2 56.9 57.2 57.4 57.5 57.6 57.7 57.7 57.8 58.0 58.0 GE 4000 51.9 53.2 58.4 59.6 61.0 61.7 62.3 62.8 62.9 63.1 63.2 63.2 63.3 63.4 63.5 63.6 GR 3500 55.6 57.0 62.6 63.9 65.7 66.5 67.2 67.7 67.9 68.0 68.1 68.2 68.2 68.3 68.5 68.6 GE 3000 60.2 61.7 67.9 69.3 71.2 72.1 72.9 73.3 73.6 73.9 74.0 74.1 74.1 74.2 74.4 74.5 GR 2500 62.2 63.8 70.4 71.8 73.8 74.8 75.6 76.1 76.3 76.6 76.8 76.9 76.9 77.0 77.2 77.3 GE 2000 64.7 66.4 73.5 75.1 77.3 78.4 79.2 79.7 80.0 80.3 80.5 80.6 80.6 80.7 80.9 81.0 65.6 81.6 82.2 67.3 78.5 81.3 81.8 81.8 GE 1800 74.5 76.1 79.6 80.4 81.0 81.9 82.0 82.3 GE 1500 67.8 69.6 77.6 79.3 81.9 83.1 84.1 84.7 85.1 85.4 85.6 85.7 85.7 85.9 86.1 86.1 87.8 GE 1200 69.4 71.2 80.0 81.8 84.8 86.2 87.1 88.2 88.5 88.7 88.8 88.8 89.0 89.1 89.2 GE 1000 70.6 72.4 81.7 83.6 86.9 88.3 89.5 90.2 90.7 91.1 91.3 91.4 91.5 91.6 91.8 91.8 GE 72.9 92.0 92.4 900 71.1 82.5 84.4 87.8 89.3 90.6 91.5 92.6 92.7 92.8 92.9 93.1 93.2 GE 800 71.3 73.2 83.0 85.1 88.6 90.1 91.5 92.4 93.0 93.5 93.8 93.9 93.9 94.1 94.3 94.3 GE 700 71.6 73.4 83.4 85.6 89.3 90.9 92.4 93.5 94.1 94.7 95.0 95.1 95.1 95.3 95.4 95.5 GE 600 71.6 73.5 83.6 85.9 89.8 91.5 93.1 94.2 94.9 95.7 96.0 96.1 96.2 96.3 96.5 96.6 95.1 96.7 97.1 97.4 97.6 GE 500 71.7 73.5 83.9 86.2 90.3 92.0 93.8 95.8 97.2 97.3 97.7 97.8 GE 400 71.7 73.6 84.0 86.4 90.6 92.3 94.2 95.5 96.3 97.3 97.6 97.9 98.0 98.2 98.3 GE 97.8 98.5 300 71.7 73.6 84.0 86.4 90.6 92.4 94.4 95.9 96.7 98.2 98.6 98.7 98.9 99.0 GE 200 71.7 73.6 84.0 86.4 90.7 92.4 94.5 95.9 96.8 98.0 98.5 98.7 98.9 99.3 99.5 99.7 GE 100 71.7 73.6 84.0 86.4 90.7 92.4 94.5 95.9 96.8 98.0 98.5 98.8 98.9 99.3 99.6 100.0 GE 000 71.7 73.6 84.0 86.4 90.7 92.4 94.5 95.9 96.8 98.0 98.5 98.8 98.9 99.3 99.7 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: JAN 80 - DEC 89 STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY LST TO UTC: - 1 MONTH: MAY HOURS: 00-02 CRILING VISIBILITY IN METERS IN GE Œ GB Œ GB GE GE GE GE Œ GE Œ GE Œ Œ FEET 90 80 60 48 32 24 20 16 12 06 04 00 112 40 10 08 NO CEIL 41.3 42.0 44.3 44.5 45.4 45.4 45.8 45.8 45.9 45.9 45.9 45.9 45.9 45.9 45.9 51.1 49.4 49.8 GE 20000 46.0 46.9 50.6 51.2 51.2 51.3 51.3 51.3 50.6 51.1 51.3 51.3 51.3 GE 18000 46.0 46.9 49.4 49.8 50.6 50.6 51.1 51.1 51.2 51.2 51.3 51.3 51.3 51.3 51.3 51.3 GE 16000 46.0 46.9 49.4 49.8 50.6 50.6 51.1 51.1 51.2 51.2 51.3 51.3 51.3 51.3 51.3 51.3 GR 14000 46.0 46.9 49.4 49.8 50.6 50.6 51.1 51.1 51.2 51.2 51.3 51.3 51.3 51.3 51.3 51.3 49.9 50.9 51.5 51.6 GE 12000 46.1 47.0 49.5 51.0 51.4 51.4 51.5 51.6 51.6 51.6 51.6 GE 10000 49.5 50.3 53.3 53.9 55.1 55.3 55.7 55.7 55.8 55.9 56.0 56.0 56.0 56.0 56.0 56.0 QR 9000 50.1 56.8 57.1 57.1 51.0 54.1 54.6 56.0 56.2 56.7 56.7 57.0 57.1 57.1 57.1 57.1 GE 8000 55.2 56.3 59.7 60.2 61.6 61.8 62.3 62.3 62.4 62.6 62.7 62.7 62.7 62.7 62.7 62.7 Œ 7000 55.6 56.8 60.1 60.6 62.0 62.3 62.7 62.7 62.8 63.0 63.1 63.1 63.1 63.1 63.1 63.1 55.9 Œ 6000 57.1 60.4 61.0 62.4 63.0 63.1 63.3 63.4 63.4 62.6 63.0 63.4 63.4 63.4 63.4 5000 58.7 60.2 63.7 65.6 66.5 66.7 66.8 GR 64.2 65.8 66.3 66.3 66.8 66.8 66.8 66.8 66.8 4500 60.6 66.3 68.0 69.1 69.5 60.5 Œ 62.2 65 . R 68.4 68.9 69.0 69.4 69.5 69.5 69.5 69.5 4000 70.8 73.2 74.3 74.8 74.8 Œ 64.4 66.1 71.3 73.7 74.4 74.5 74.7 74.8 74.8 74.8 74.8 67.4 78.4 3500 69.1 74.2 75.1 77.1 77.6 78.5 78.6 78.8 78.9 78.9 78.9 78.9 Œ 78.9 78.9 GR. 3000 70.1 72.0 78.2 79.0 81.3 82.0 82.9 83.0 83.1 83.4 83.5 83.7 83.7 83.7 83.7 83.7 Œ 2500 70.5 72.5 78.7 79.6 81.8 82.6 83.4 83.5 83.7 84.0 84.1 84.2 84.2 84.2 84.2 84.2 Œ 2000 71.8 73.9 80.1 81.0 83.3 84.1 84.9 85.1 85.2 85.5 85.6 85.7 85.7 85.7 85.7 85.7 1800 72.7 81.0 84.2 85.8 85.9 86.0 86.3 86.5 86.6 86.6 Œ 74.7 81.8 84.9 86.6 86.6 86.6 Œ 1500 75.2 77.2 83.7 84.6 87.3 88.2 89.1 89.2 89.4 89.7 89.8 89.9 89.9 89.9 89.9 89.9 Œ 1200 76.6 78.7 85.6 86.8 89.6 90.4 91.4 91.5 91.6 91.9 92.0 92.3 92.3 92.3 92.3 92.3 GE 1000 77.4 79.6 86.9 88.4 91.5 92.6 93.5 93.8 93.9 94.2 94.3 94.5 94.5 94.5 94.5 94.5 900 77.5 79.7 87.1 88.8 92.0 94.4 95.2 95.4 95.4 95.4 95.4 CE 93.1 94.6 94.7 95.1 95.4 GE 800 77.6 79.8 87.4 89.4 92.8 94.0 95.3 95.5 95.6 95.9 96.0 96.2 96.2 96.2 96.2 96.2 96.1 Œ 700 77.6 79.8 87.7 90.1 93.7 94.8 96.3 96.6 96.9 97.0 97.2 97.2 97.2 97.2 97.2 97.1 CE 600 77.7 79.9 88.1 90.5 94.2 95.8 97.4 97.7 98.1 98.2 98.4 98.4 98.6 98.6 98.6 77.8 80.0 88.2 90.6 97.3 98.0 98.5 98.6 98.8 98.8 99.0 Œ 500 94.4 96.0 97.6 99.0 99.0 Œ 400 77.8 80.0 88.2 90.6 94.4 96.0 97.5 97.8 98.2 98.8 98.9 99.1 99.1 99.4 99.4 99.5 Œ 300 77.8 80.0 90.6 94.5 97.6 99.0 99.1 99.4 99.6 88.2 96.1 98.1 98.4 99.4 99.6 99.7 88.2 200 GE 77.8 80.0 90.6 94.5 96.1 97.6 98.1. 98.4 99.0 99.1 99.4 99.4 99.6 99.6 99.7 Œ 100 77.8 80.0 88.2 90.6 94.5 96.1 97.6 98.1 98.4 99.0 99.1 99.4 99.5 99.7 99.9 100.0 Œ 000 77.8 80.0 88.2 90.6 94.5 96.1 97.6 98.1 98.4 99.0 99.1 99.4 99.5 99.7 99.9 100.0

TOTAL NUMBER OF OBSERVATIONS 930

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: MAY HOURS: 03-05 CELLING VISIBILITY IN METERS IN GR GE GE GE GE GE GE GE GE GE GE GE Œ GE GR GE 16 112 80 48 32 20 10 FEET 90 60 40 24 12 08 06 04 00 NO CEIL 34.6 35.5 39.5 40.2 41.6 41.6 41.8 42.4 42.6 43.0 43.0 43.0 43.2 43.3 43.5 43.7 GE 20000 37.2 45.7 38.1 42.4 43.3 44.7 44.7 44.9 45.5 46.2 46.2 46.2 46.5 46.6 46.8 46.9 GE 18000 37.2 38.1 42.4 43.3 44.7 44.7 44.9 45.5 45.7 46.2 46.2 46.2 46.5 46.6 46.8 46.9 GE 16000 37.2 44.9 45.7 46.2 38.1 42.4 43.3 44.7 44.7 45.5 46.2 46.2 46.5 46.6 46.8 46.9 GE 14000 37.2 38.1 42.4 43.3 44.7 44.7 44.9 45.5 45.7 46.2 46.2 46.2 46.5 46.6 46.8 46.9 GE 12000 37.2 38.1 42.4 43.3 44.7 44.7 44.9 45.5 45.7 46.2 46.2 46.2 46.5 46.6 46.8 46.9 GE 10000 40.2 49.2 50.0 50.5 41.2 46.0 47.2 48.7 48.7 49.8 50.6 50.6 51.0 51.1 40.8 GE 9000 41.7 46.7 47.8 49.5 49.5 50.1 50.6 50.9 51.4 51.5 51.8 51.5 51.9 52.2 52.3 GE 8000 44.9 46.3 51.7 52.9 54.5 54.5 55.3 55.9 56.1 56.7 56.8 56.8 57.1 57.2 57.4 57.5 GE 7000 45.4 46.9 52.4 53.5 55.4 55.4 56.1 56.8 57.0 57.5 57.6 57.6 58.0 58.1 58.3 58.4 45.8 57.2 58.0 GE 6000 47.3 52.8 55.8 56.6 57.4 58.2 58.5 58.8 54.0 55.8 58.2 58.6 58.9 GE 5000 47.8 60.0 60.5 60.8 60.8 49.4 55.3 56.5 58.4 58.4 59.1 59.8 61.1 61.2 61.4 61.5 GE 4500 49.4 50.9 56.9 58.2 60.2 60.2 61.2 61.8 62.0 62.6 62.8 62.8 63.1 63.2 63.4 63.5 GE 4000 52.4 53.9 60.6 61.9 64.3 64.4 65.5 66.2 66.6 67.1 67.3 67.3 67.6 67.7 68.0 68.1 70.4 71.0 GE 3500 54.7 56.2 63.4 65.1 67.6 67.8 69.2 70.1 71.2 71.2 71.6 71.7 72.0 72.2 GE 3000 56.8 58.3 66.0 67.8 70.4 70.8 72.5 73.4 73.. 74.3 74.5 74.5 74.9 75.1 75.4 75.5 GE 2500 57.4 58.9 67.0 68.8 71.5 71.8 73.5 74.5 74.9 75.5 75.7 75.7 76.1 76.2 76.6 76.7 77.8 GE 2000 59.6 61.3 69.7 71.6 74.3 74.7 76.5 77.4 78.5 78.7 78.7 79.1 79.2 79.6 79.7 GE 1800 60.0 70.3 77.4 78.4 78.8 79.5 61.7 72.5 75.2 75.6 79.7 79.7 80.1 80.2 80.5 80.6 GE 1500 62.0 63.9 73.1 75.3 78.0 78.4 80,2 81.5 82.0 82.7 82.9 82.9 83.3 83.4 83.8 83.9 GE 1200 64.0 65.8 75.7 78.0 80.8 81.3 83.2 84.6 85.2 85.8 86.0 86.0 86.5 86.9 86.6 87.0 GE 1000 64.9 66.8 77.1 79.9 83.1 83.8 85.8 87.5 88.1 88.7 88.9 89.0 89.5 89.6 89.9 90.0 65.2 67.0 77.4 80.3 88.3 88.8 89.5 89.7 90.2 90.8 GE 900 83.8 84.4 86.6 89.8 90.4 90.9 GE 800 65.9 67.7 78.4 81.4 84.8 85.5 87.7 89.5 90.0 90.6 90.9 91.0 91.4 91.6 91.9 92.0 GE 700 66.1 68.0 78.7 81.7 85.2 85.8 88.1 89.8 90.3 91.1 91.3 91.4 92.0 92.3 92.6 92.7 GE 600 66.6 68.5 79.2 82.3 86.2 86.9 89.4 91.2 91.7 92.6 92.9 93.0 93.7 93.9 94.2 94.4 GE 500 66.7 68.6 79.5 82.6 87.6 90.2 92.0 92.7 94.0 94.3 95.3 95.5 86.9 94.6 95.8 96.0 GE 400 66.7 68.6 79.6 82.8 87.2 88.0 90.6 92.7 93.3 94.7 95.3 95.9 96.6 96.8 97.1 97.3 GE 300 66.7 68.6 79.6 82.8 87.2 88.1 90.9 93.2 94.0 95.6 96.8 97.4 97.7 96.1 98.1 98.3 66.7 GE 200 68.6 79.6 82.8 87.2 88.1 90.9 93.3 94.1 95.7 96.6 97.2 97.8 98.2 98.6 98.9 GE 100 66.7 68.6 79.6 82.8 87.2 88.1 90.9 93.3 94.1 95.7 96.6 97.2 97.8 98.6 99.1 100.0 GE 000 66.7 68.6 79.6 82.8 87.2 88.1 90.9 93.3 94.1 95.7 96.6 97.2 97.8 98.6 99.1 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: MAY HOURS: 06-08 CRILING VISIBILITY IN METERS IN GR GE GE Œ GE GE GE GΕ GE CE GE Œ GE GE GE Œ 112 FRET 90 80 60 48 40 32 24 20 16 12 10 80 06 04 00 27.5 27.7 NO CEIL 32.0 33.1 35.2 35.7 36.1 36.3 36.3 36.3 36.3 36.3 36.5 36.6 36.7 36.7 GE 20000 29.7 29.9 35.2 36.2 38.7 39.5 40.1 40.6 40.8 40.9 41.0 41.0 41.1 41.3 41.4 41.5 39.1 GR 18000 30.0 30.2 35.6 36.7 39.9 40.5 41.1 41.2 41.3 41.4 41.4 41.5 41.7 41.8 41.9 GE 16000 30.0 30.2 35.6 36.7 39.1 39.9 40.5 41.1 41.2 41.3 41.4 41.4 41.5 41.7 41.8 41.9 GE 14000 30.1 30.3 35.7 40.0 36.8 39.2 40.6 41.2 41.3 41.4 41.5 41.5 41.6 41.8 41.9 42.0 GE 12000 31.0 36.5 37.5 40.0 40.8 41.4 42.0 42.2 42.3 42.3 42.4 30.8 41.9 42.6 42.7 42.8 GE 10000 32.8 33.0 38.9 40.1 42.9 43.7 44.3 44.9 45.1 45.2 45.3 45.4 45.5 45.7 45.8 45.9 Œ 9000 33.8 34.1 40.8 41.9 45.2 45.9 46.7 47.3 47.4 47.5 47.6 47.7 47.8 48.1 48.2 48.3 37.7 GR 8000 37.2 44.8 46.3 49.8 50.6 51.5 52.2 52.3 52.4 52.5 52.6 52.7 52.9 53.0 53.1 GE 7000 45.5 47.2 53.3 53.4 53.7 37.5 38.1 50.6 51.5 52.5 53.1 53.2 53.5 53.9 54.0 54.1 38.3 54.2 Œ 6000 37.7 46.1 51.4 52.3 53.2 53.9 54.0 54.1 54.3 54.4 54.6 54.8 54.9 48.0 54.6 Œ 5000 39.5 40.0 48.2 50.0 53.5 55.7 56.3 56.5 56.6 56.7 56.8 56.9 57.1 57.3 4500 40.8 41.4 49.7 56.5 57.6 58.5 58.6 58.7 58.8 59.0 59.5 Œ 51.6 55.4 58.4 59.2 59.6 Œ 4000 42.5 52.5 58.5 59.7 60.9 61.9 62.0 62.2 62.3 43.1 54.4 61.6 62.6 62.8 63.2 63.3 GE 3500 44.9 55.1 57.0 61.1 62.3 64.5 64.6 64.9 65.1 65.4 44.3 63.4 64.2 65.8 66.2 66.3 GE 3000 46.0 46.7 57.5 59.7 64.0 65.3 66.9 68.0 68.3 68.6 68.9 69.0 69.4 69.8 70.2 70.3 GR 2500 47.1 47.7 59.0 70.1 71.2 61.2 65.5 66.8 68.5 69.7 70.8 71.3 71.6 72.0 72.5 72.6 GE 2000 48.8 49.5 61.3 67.8 69.1 71.0 72.3 72.7 73.4 73.9 74.0 74.3 74.7 75.2 75.3 63.5 Œ 1800 49.5 50.1 62.5 64.7 69.0 70.4 72.3 73.5 74.0 74.7 75.2 75.3 75.6 76.5 76.0 76.6 Œ 1500 53.1 53.9 67.5 69.8 74.7 76.1 78.0 79.5 79.9 80.8 81.2 81.3 81.6 82.0 82.5 82.6 Œ 1200 55.1 55.9 70.3 72.6 77.6 79.2 81.2 82.8 83.3 84.2 84.6 84.7 85.1 85.5 85.9 Œ 1000 56.7 57.6 72.8 75.5 80.5 82.4 84.9 86.9 87.4 88.4 89.0 89.1 89.6 90.0 90.4 90.5 GΕ 900 56.7 57.6 72.8 75.6 81.1 83.0 85.6 87.6 88.4 89.5 90.2 90.3 90.8 91.2 91.6 91.7 GE 800 56.8 57.7 73.3 76.1 81.6 83.5 86.1 88.2 88.9 90.0 90.8 90.9 91.3 91.7 92.2 92.3 91.8 92.6 92.8 Œ 700 57.5 58.5 74.4 77.2 83.0 84.9 87.8 90.0 90.8 93.2 93.7 94.1 94.2 93.5 95.8 95.9 84.2 94.3 94.5 GR 600 58.2 59.1 75.3 78.2 86.6 89.5 91.6 92.4 94.9 95.4 Œ 500 58.6 59.6 76.0 85.2 87.5 90.8 94.9 95.7 95.9 97.2 97.3 78.9 93.0 93.8 96.3 96.8 Œ 400 59.0 60.0 76.6 79.6 85.8 88.2 91.5 94.0 94.8 96.1 97.0 97.2 97.6 98.2 98.6 98.8 GR 300 59.0 60.0 76.6 79.6 85.9 88.3 91.7 94.3 95.2 96.5 97.4 97.6 98.1 98.6 99.0 99.2 88.3 95.4 98.9 200 59.0 60.0 76.6 85.9 94.5 96.7 97.6 98.0 98.4 99.5 99.7 GE 79.6 91.7 Œ 100 59.0 60.0 76.6 79.6 85.9 88.3 91.7 94.5 95.4 96.7 97.6 98.0 98.4 99.0 99.7 100.0

TOTAL NUMBER OF OBSERVATIONS 930

GE 000 59.0 60.0 76.6 79.6 85.9 88.3 91.7 94.5 95.4 96.7 97.6 98.0 98.4 99.0 99.7 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION	NUMBER:	106070		TO UTC:		ndahlem	AB/GERI	MANY		PERIOD MONTH:		ORD: JA		DEC 89		
CEILING	• • • • • • •	• • • • • • •		• • • • • • •	• • • • • • • • • • • • • • • • • • • •	VISIBIL	יייי דאי		• • • • • • •	•••••	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	•••••
IN	l ge	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE
FEET	112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
	• • • • • • •			• • • • • •												
	1															
NO CEIL	30.5	31.4	34.2	34.7	35.1	35.2	35.3	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4
											44 5	44.5				
GE 20000 GE 18000	35.3 35.3	36.2 36.2	39.8 39.8	40.6 40.6	41.0 41.0	41.1 41.1	41.2 41.2	41.3 41.3	41.3 41.3	41.3 41.3	41.3 41.3	41.3 41.3	41.3 41.3	41.3 41.3	41.3 41.3	41.3 41.3
GE 16000		36.2	39.8	40.6	41.0	41.1	41.2	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
GE 14000		36.2	39.8	40.6	41.0	41.1	41.2	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
GE 12000		36.7	40.4	41.3	41.6	41.7	41.8	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
GE 10000	36.9	37.8	42.3	43.2	43.7	43.8	43.9	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0
GE 9000	38.3	39.2	43.9	44.8	45.3	45.4	45.5	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6
GE 8000		41.5	46.6	47.5	48.2	48.4	48.5	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6
GE 7000		42.0	47.5	48.5	49.2	49.5	49.6	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
GE 6000	41.2	42.2	47.6	48.6	49.4	49.6	49.7	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
GE 5000	42.3	43.2	49.1	50.2	51.1	51.3	51.4	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
GE 4500		44.0	50.0	51.1	52.2	52.4	52.5	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6
GE 4000		47.4	53.7	54.9	56.2	56.5	56.7	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8
GE 3500	49.7	50.6	57.1	58.5	60.0	60.2	60.4	60.6	60.8	60.8	60.9	60.9	60.9	60.9	60.9	60.9
GE 3000	56.0	57.1	63.9	65.4	66.9	67.2	67.5	67.7	67 °	68.0	68.1	68.1	68.1	68.1	68.1	68.1
GE 2500		60.3	67.3	68.8	70.6	71.2	71.5	71./	71.8	71.9	72.0	72.0	72.0	72.0	72.0	72.0
GE 2000		64.3	72.2	73.9	75.7	76.3	76.8	77.1	77.2	77.3	77.4	77.4	77.4	77.4	77.4	77.4
GE 1800	63.5	64.9	73.2	74.9	76.8	77.4	77.8	78.2	78.3	78.4	78.5	78.5	78.5	78.5	78.5	78.5
GE 1500	68.9	70.8	79.8 83.7	81.6 85.7	83.9	84.6	85.3	85.7	85.8	85.9 91.C	86.0	86.0 91.1	86.0	86.0	86.0	86.0
GE 1200	71.9	73.8	83.7	85.7	88.4	89.1	90.0	90.5	90.9	91.0	91.1	91.1	91.1	91.1	91.1	91.1
GE 1000	73.8	75.6	85.7	87.8	91.0	91.8	93.1	93.7	94.1	94.2	94.3	94.3	94.3	94.3	94.3	94.3
GE 900	1	76.0	86.5	88.7	92.5	93.4	94.7	95.4	95.9	96.1	96.2	96.2	96.2	96.2	96.2	96.2
GE 800	74.2	76.0	86.8	89.0	93.0	94.0	95.3	96.0	96.6	96.8	96.9	96.9	96.9	96.9	96.9	96.9
GE 700	74.4	76.2	87.0	89.6	93.8	95.1	96.3	97.1	97.6	97.8	98.0	98.0	98.0	98.0	98.0	98.0
GE 600	74.5	76.3	87.3	89.9	94.2	95.5	96.9	97.6	98.2	98.4	98.5	98.5	98.5	98.5	98.5	98.5
500		20.0														
GE 500	1	76.6	87.7	90.3	94.6	96.0	97.5	98.4	98.9	99.1	99.2	99.2	99.2	99.2	99.2	99.2
GE 400 GE 300		76.6 76.7	87.8 88.0	90.4 90.5	94.7 94.8	96.1 96.2	97.7 97.8	98.6 98.7	99.1 99.2	99.4 99.5	99.5 99.6	99.5 99.6	99.5 99.6	99.5 99.6	99.5 99.6	99.5 99.6
GE 200		76.7	88.1	90.5	94.9	96.2	97.6	98.8	99.4	99.5	99.0	99.7	99.7	100.0	100.0	100.0
GE 100	1	76.7	88.1	90.6	94.9	96.3	98.0	98.8	99.4	99.6	99.7	99.7	99.7	100.0	100.0	100.0
																
GE 000	74.8	76.7	88.1	90.6	94.9	96.3	98.0	98.8	99.4	99.6	99.7	99.7	99.7	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 930

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: MAY HOURS: 12-14

CRILING

VISIBILITY IN METERS

				TOT	10 010	1					remail.	runi	noore.	12-14			
•••	• • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • • •			• • • • • • •	• • • • • • •	• • • • • • •	•••••	• • • • • • •	•••••	• • • • • • •		• • • • • •
	ILING						VISIBIL										
	IN	GE	GE	GE	GE	GE	GE	GE	Œ	GE	Œ	GE	GE	GE	Œ	GE	GE
F	EET	112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
• •	• • • • • •					• • • • • •				• • • • • •							
		i															
NO	CEIL	28.2	29.1	29.7	29.7	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9
Œ	20000	35.3	36.5	37.1	37.1	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
Œ	18000	35.5	36.7	37.3	37.3	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5
Œ	16000	35.5	36.7	37.3	37.3	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5
Œ	14000	35.5	36.7	37.3	37.3	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5
Œ	12000	36.1	37.3	38.0	38.0	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2
GE	10000	38.4	39.8	40.8	40.8	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
GE	9000	39.2	40.6	41.7	41.7	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0
GE	8000	42.2	43.5	44.6	44.6	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9	44.9
GE	7000	43.3	44.7	46.1	46.1	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5
GE	6000	43.7	45.1	46.5	46.5	46.8	46.8	46.8	46.8	46.8	46.8	46.8	46.8	46.8	46.8	46.8	46.8
	0000	1011	44.4	1010	40.5	10.0	40.0	10.0	40.0	1010	1010	40.0	1010	40.0	****	10.0	****
GE	5000	45.2	46.6	48.3	48.4	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7	48.7
GE	4500	47.0	48.6	50.6	50.8	51.3	51.3	51.4	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
GR	4000	51.3	52.9	55.4	55.5	56.0	56.0	56.1		56.2	56.2	56.2	56.2	56.2		56.2	56.2
	3500	59.1							56.2						56.2		
Œ		ĺ	60.9	63.8	63.9	64.5	64.5	64.6	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
GE	3000	68.0	69.8	73.1	73.2	74.0	74.0	74.1	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
_																	
Œ	2500	73.0	75.1	78.7	78.9	79.9	79.9	80.0	86.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1
Œ	2000	78.3	80.3	84.7	85.2	86.3	86.3	86.5	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
Œ	1800	80.2	82.3	87.2	87.6	88.8	88.8	88.9	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
Œ	1500	82.8	84.8	90.0	90.4	91.8	91.8	92.2	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
Œ	1200	85.4	87.4	92.9	93.3	94.8	95.2	95.5	95.6	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8
GE	1000	86.3	88.4	94.3	94.7	96.6	96.9	97.2	97.3	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
Œ	900	86.7	88.7	94.7	95.2	97.2	97.5	97.8	98.0	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
Œ	800	87.0	89.0	95.2	95.6	97.6	98.0	98.3	98.5	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
Œ	700	87.1	89.1	95.5	95.9	98.0	98.4	98.7	98.9	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
Œ	600	87.1	89.1	95.5	95.9	98.0	98.4	98.9	99.1	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
GE	500	87.3	89.4	95.7	96.1	98.2	98.6	99.1	99.4	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
Œ	400	87.3	89.4	95.7	96.1	98.2	98.6	99.1	99.4	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
GE	300	87.3	89.4	95.7	96.1	98.2	98.6	99.2	99.5	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
GE	200	87.3	89.4	95.7	96.1	98.2	98.6	99.2	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GR	100	87.3	89.4	95.7	96.1	98.2	98.6	99.2	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
				,													
GE	000	87.3	89.4	95.7	96.1	98.2	98.6	99.2	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: MAY HOURS: 15-17 CEILING VISIBILITY IN METERS Œ GE GE GE TN GE Œ GE GE GE Œ GE Œ GE GE Œ GR FEET 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 27.6 28.2 28.6 28.7 28.9 28.9 28.9 28.9 28.9 28.9 28.9 28.9 28.9 28.9 28.9 28.9 GE 20000 34.6 35.8 36.6 36.7 36.9 36.9 36.9 36.9 36.9 36.9 36.9 36.9 36.9 36.9 36.9 36.9 GE 18000 36.3 37.1 37.2 37.4 37.4 37.4 37.4 37.4 37.4 37.4 37.4 37.4 37.4 37.4 37.4 35.2 GE 16000 35.2 36.3 37.1 37.2 37.4 37.4 37.4 37.4 37.4 37.4 37.4 37.4 37.4 37.4 37.4 37.4 37.6 37.6 37.6 37.6 37.6 GE 14000 35.4 36.6 37.3 37.4 37.6 37.6 37.6 37.6 37.6 37.6 37.6 37.1 37.8 38.2 38.2 38.2 38.2 38.2 38.2 38.2 38.2 38.2 38.2 38.2 GE 12000 35.9 38.0 38.2 42.9 GE 10000 42.9 42.9 42.9 42.9 40.1 41.4 42.4 42.7 42.9 42.9 42.9 42.9 42.9 42.9 42.9 GR 9000 41.2 42.6 43.5 43.9 44.1 44.1 44.1 44.1 44.1 44.1 44.1 44.1 44.1 44.1 44.1 44.1 GE 8000 44.9 46.3 47.4 47.7 48.0 48.0 48.0 48.0 48.0 48.0 48.0 48.0 48.0 48.0 48.0 48.0 47.1 48.7 48.7 48.7 48.7 GE 7000 45.7 48.2 48.5 48.7 48.7 48.7 48.7 48.7 48.7 48.7 48.7 GE 6000 46.2 47.6 48.7 49.0 49.2 49.2 49.2 49.2 49.2 49.2 49.2 49.2 49.2 49.2 49.2 49.2 GE 5000 48.8 50.2 51.6 51.9 52.3 52.3 52.3 52.3 52.3 52.3 52.3 52.3 52.3 52.3 52.3 52.3 GE 4500 51.4 52.8 54.5 54.8 55.2 55.2 55.2 55.2 55.2 55.2 55.2 55.2 55.2 55.2 55.2 55.2 4000 62.3 64.4 64.7 64.7 64.7 GE 60.4 64.1 64.7 64.7 64.7 64.7 64.7 64.7 64.7 64.7 64.7 GE 3500 70.1 72.5 74.6 75.1 75.5 75.5 75.5 75.5 75.5 75.5 75.5 75.5 75.5 75.5 75.5 75.5 GE 3000 77.5 80.1 82.5 83.0 83.5 83.5 83.5 83.5 83.5 83.5 83.5 83.5 83.5 83.5 83.5 83.5 GE 2500 81.5 84.1 86.7 87.5 88.1 88.1 88.1 88.1 88.1 88.1 88.1 88.1 88.1 88.1 88.1 88.1 2000 87.5 92.4 92.4 92.4 GE 84.9 90.8 91.7 92.4 92.4 92.4 92.4 92.4 92.4 92.4 92.4 92.4 GE 1800 86.2 88.8 92.0 93.0 93.9 93.9 93.9 93.9 93.9 93.9 93.9 93.9 93.9 93.9 93.9 93.9 GΕ 1500 87.5 90.1 93.5 94.5 95.5 95.8 95.8 95.8 95.8 95.8 95.8 95.8 95.5 95.7 95.8 95.8 GR 1200 89.1 91.7 95.6 96.6 97.5 97.5 97.7 97.8 97.8 97.8 97.8 97.8 97.8 97.8 97.8 97.8 97.5 99.2 GE 1000 89.6 92.2 96.2 98.9 98.9 99.1 99.2 99.2 99.2 99.2 99.2 99.2 99.2 99.2 96.3 99.4 GE 900 89.6 92.2 97.6 99.0 99.0 99.2 99.4 99.4 99.4 99.4 99.4 99.4 99.4 99.4 89.6 92.2 97.7 99.1 99.4 99.5 99.5 99.5 99.5 99.5 99.5 99.5 GΕ 800 96.3 99.1 99.5 99.5 CR 700 89.6 92.2 96.5 97.8 99.4 99.4 99.6 99.7 99.8 99.8 99.8 99.8 99.8 99.8 99.8 99.8 GE 600 89.6 92.2 96.5 98.0 99.5 99.5 99.8 99.9 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 92.2 GE 500 89.6 96.5 98.0 99.5 99.5 99.8 99.9 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 400 89.6 92.2 99.9 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 GE 96.5 98.0 99.5 99.5 99.8 GΕ 300 89.6 92.2 96.5 98.0 99.5 99.5 99.8 99.9 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 GE 200 89.6 92.2 96.5 98.0 99.5 99.5 99.9 100.0 100.0 100.0 100.0 100.0 100.0 100.0 99.8 GE 100 89.6 92.2 96.5 98.0 99.5 99.8 99.9 100.0 100.0 100.0 100.0 100.0 100.0 100.0 99.5 GE 000 89.6 92.2 96.5 98.0 99.5 99.8 99.9 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0

TOTAL NUMBER OF OBSERVATIONS 930

D - 2 - 42

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: MAY HOURS: 18-20 CRILING VISIBILITY IN METERS IN GR GE GE GE GE ge ge Œ GÈ GE GE GE GE Œ Œ 24 16 10 00 FEET 112 90 80 60 48 40 32 20 12 08 06 04 NO CEIL 36.1 37.2 38.1 38.1 38.1 38.1 38.1 38.1 38.1 38.1 38.1 38.1 38.1 38.1 38.1 38.1 47.1 47.1 47.1 47.1 47.1 GE 20000 44.7 46.0 47.0 47.0 47.1 47.1 47.1 47.1 47.1 47.1 47.1 GE 18000 46.1 47.1 47.1 47.2 47.2 47.2 47.2 47.2 47.2 47.2 47.2 47.2 47.2 47.2 47.2 44.8 GE 16000 47.2 47.2 47.2 47.2 47.2 47.2 44.8 46.1 47.1 47.1 47.2 47.2 47.2 47.2 47.2 47.2 GE 14000 45.2 46.5 47.4 47.4 47.5 47.5 47.5 47.5 47.5 47.5 47.5 47.5 47.5 47.5 47.5 47.5 GE 12000 45.5 46.8 47.7 47.7 47.8 47.8 47.8 47.8 47.8 47.8 47.8 47.8 47.8 47.8 47.8 47.8 GR 10000 49.5 50.9 52.4 52.5 52.7 52.7 52.7 52.7 52.8 52.8 52.8 52.8 52.8 5 . . 8 52.8 52.8 Œ 9000 51.5 53.0 54.5 54.6 54.8 54.8 54.8 54.8 54.9 54.9 54.9 54.9 54.9 54.9 54.9 54.9 Œ 8000 55.3 56.8 58.5 58.6 58.8 58.8 58.8 58.8 58.9 58.9 58.9 58.9 58.9 58.9 58.9 58.9 7000 60.1 60.2 60.4 60.4 60.5 60.5 60.5 60.5 60.5 60.5 60.5 Œ 56.8 58.3 60.4 60.4 60.5 Œ 6000 57.0 58.5 60.3 60.4 60.6 60.8 60.8 60.8 60.8 60.8 60.8 60.8 60.6 60.6 60.6 60.8 Œ 5000 60.0 61.5 63.5 63.7 63.9 63.9 63.9 63.9 64.0 64.0 64.0 64.0 64.0 64.0 4500 65.3 67.8 68.0 68.3 68.3 68.4 68.4 68.4 68.4 68.4 68.4 68.4 Œ 63.8 68.3 68.3 68.4 Œ 4000 70.6 72.2 75.2 75.4 76.0 76.0 76.0 76.0 76.1 76.1 76.1 76.1 76.1 76.1 76.1 76.1 3500 Œ 74.9 76.5 79.8 80.5 80.5 80.6 80.6 80.8 80.8 80.8 80.8 80.8 79.6 80.5 80.5 80.8 GR 3000 80.5 82.2 85.4 85.8 87.0 87.1 87.1 87.1 87.2 87.2 87.3 87.3 87.3 87.3 87.3 87.3 89.9 90.0 GR 2500 82.8 88.0 89.9 90.0 90.1 90.1 90.1 90.1 90.1 90.1 84.4 88.5 89.8 89.9 Œ 2000 86.0 89.7 90.2 91.7 91.8 91.8 91.9 91.9 92.0 92.0 92.0 92.0 92.0 92.0 84.4 91.8 Œ 1800 84.9 86.7 90.3 90.9 92.4 92.5 92.6 92.7 92.8 92.8 92.9 92.9 92.9 92.9 92.9 92.9 1500 95.2 95.3 Œ 85.9 87.7 92.0 92.7 94.4 94.7 94.9 95.1 95.2 95.3 95.3 95.3 95.3 95.3 97.0 97.0 Œ 1200 86.7 88.7 93.5 94.3 96.1 96.5 96.7 96.8 96.9 96.9 97.0 97.0 97.0 97.0 Œ 1000 87.1 89.1 94.7 95.7 97.5 98.1 98.6 98.7 98.8 98.8 98.9 98.9 98.9 98.9 98.9 98.9 Œ 900 87.2 89.2 94.9 96.0 97.8 98.4 98.9 99.0 99.1 99.1 99.2 99.2 99.2 99.2 99.2 99.2 800 89.2 99.5 CR 87.2 95.2 96.2 98.1 98.6 99.1 99.2 99.4 99.4 99.5 99.5 99.5 99.5 99.5 GE 700 87.2 89.2 95.2 98.6 99.2 99.5 99.6 99.7 99.7 99.7 96.2 98.1 99.4 99.7 99.7 99.7 600 89.2 99.5 GE 87.2 95.2 96.2 98.1 98.6 99.2 99.4 99.6 99.7 99.7 99.7 99.7 99.7 99.7 Œ 500 87.4 89.5 95.4 96.5 98.4 98.9 99.6 99.7 99.8 99.9 100.0 100.0 100.0 100.0 100.0 87.4 89.5 98.9 GR 400 95.4 96.5 98.4 99.6 99.7 99.8 99.9 100.0 100.0 100.0 100.0 100.0 100.0 GE 300 87.4 89.5 95.4 96.5 98.4 98.9 99.6 99.7 99.8 99.9 100.0 100.0 100.0 100.0 100.0 Œ 200 98.9 87.4 89.5 95.4 96.5 98.4 99.6 99.7 99.8 99.9 100.0 100.0 100.0 100.0 100.0 95.4 Œ 100 87.4 89.5 96.5 98.4 98.9 99.6 99.7 99.8 99.9 100.0 100.0 100.0 100.0 100.0 100.0 000 87.4 89.5 95.4 96.5 98.4 98.9 99.6 99.7 99.8 99.9 100.0 100.0 100.0 100.0 100.0 GR

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: MAY HOURS: 21-23 CEILING VISIBILITY IN METERS GE GE GE Œ GE Œ TN GE GR GR GR GR GE GE GE GE GE 80 60 32 24 20 08 04 00 FEET 112 90 48 40 16 12 10 06 NO CRIL 43.9 45.1 45.8 45.8 45.9 45.9 45.9 45.9 45.9 45.9 45.9 45.9 45.9 45.9 45.9 GE 20000 49.2 50.6 51.5 51.6 51.7 51.7 51.7 51.7 51.7 51.7 51.7 51.7 51.7 51.7 51.7 51.7 GE 18000 49.2 51.7 51.7 51.7 51.7 51.7 51.7 51.7 51.7 50.6 51.5 51.6 51.7 51.7 51.7 51.7 GE 16000 49.4 50.8 51.6 51.7 51.8 51.8 51.8 51.8 51.8 51.8 51.8 51.8 51.8 51.8 51.8 51.8 GE 14000 49.4 50.8 51.6 51.7 51.8 51.8 51.8 51.8 51.8 51.8 51.8 51.8 51.8 51.8 51.8 51.8 51.9 52.0 52.0 52.0 52.0 52.0 GE 12000 49.5 50.9 51.8 52.0 52.0 52.0 52.0 52.0 52.0 52.0 57.1 57.1 GE 10000 53.8 55.2 56.5 57.1 57.1 57.1 57.1 57.1 57.1 57.1 57.1 57.1 57.1 56.9 58.3 GE 9000 54.9 56.3 57.6 58.1 58.3 58.3 58.3 58.3 58.3 58.3 58.3 58.3 58.3 58.3 58.3 GE 8000 60.4 61.9 63.5 64.0 64.2 64.3 64.3 64.3 64.3 64.3 64.3 64.3 64.3 64.3 64.3 64.3 GR 7000 65.2 65.5 65.5 65.5 65.5 61.6 63.1 64.7 65.4 65.5 65.5 65.5 65.5 65.5 65.5 65.5 GE 6000 61.8 63.3 64.9 65.4 65.6 65.7 65.7 65.7 65.7 65.7 65.7 65.7 65.7 65.7 65.7 65.7 · GE 5000 64.8 66.6 68.3 68.7 69.0 69.1 69.1 69.1 69.1 69.1 69.1 69.1 69.1 69.1 69.1 69.1 4500 67.4 69.4 71.2 71.6 72.0 72.3 72.3 72.3 72.3 72.3 72.3 72.3 72.3 72.3 72.3 72.3 GE 78.4 GR 4000 77.2 77.7 78.4 78.4 78.4 78.4 78.4 78.4 78.4 72.3 74.4 78.2 78.4 78.4 78.4 GR 3500 76.5 78.6 81.9 82.5 82.9 83.1 83.1 83.1 83.1 83.1 83.1 83.1 83.1 83.1 83.1 83.1 Œ 3000 80.1 .82.3 86.1 86.8 87.2 87.6 87.6 87.6 87.6 87.6 87.6 87.6 87.6 87.6 87.6 87.6 88.7 GE 2500 80.9 83.0 86.9 87.5 38.2 88.7 88.7 88.7 88.7 88.7 88.7 88.7 88.7 88.7 2000 83.0 89.1 89.8 91.1 91.1 91.1 91.1 91.1 91.1 91.1 GE 85.2 90.4 91.1 91.1 91.1 91.1 GR 1800 83.2 85.4 89.5 90.1 90.8 91.5 91.5 91.5 91.5 91.5 91.5 91.5 91.5 91.5 91.5 91.5 93.5 GE 1500 84.6 86.8 91.2 91.9 92.8 93.5 93.5 93.5 93.5 93.5 93.5 93.5 93.7 93.7 93.7 1200 85.5 87.6 93.3 95.1 95.1 95.1 95.1 95.1 95.1 95.1 95.2 GE 92.6 94.3 95.1 95.2 95.2 GE 86.2 88.4 93.5 94.6 95.8 96.9 96.9 96.9 96.9 96.9 96.9 97.0 97.0 97.0 1000 96.7 96.9 88.4 95.3 97.5 97.5 GE 900 86.2 94.0 96.5 97.3 97.5 97.5 97.5 97.5 97.5 97.8 97.8 97.8 97.0 97.8 98.1 95.7 98.1 GR 800 86.6 88.7 94.4 98.1 98.1 98.1 98.1 98.1 98.4 98.4 98.4 88.7 97.4 98.6 98.6 98.6 98.9 GE 700 86.6 94.8 96.1 98.4 98.6 98.6 98.6 98.6 98.9 98.9 600 96.2 98.8 98.8 98.9 98.9 98.9 GE 86.6 88.7 94.9 97.6 98.6 98.9 98.9 99.2 99.2 99.2 GE 500 86.7 88.8 95.1 96.3 97.7 98.7 98.9 98.9 99.0 99.0 99.0 99.0 99.0 99.4 99.4 99.4 GE 400 86.7 88.8 95.1 96.3 97.7 98.7 99.0 99.0 99.1 99.1 99.1 99.1 99.1 99.5 99.5 99.5 300 86.7 95.1 96.3 99.4 GR 88.8 97.7 98.8 99.1 99.1 99.4 99.5 99.6 99.6 99.9 99.9 99.9 GΕ 200 86.7 88.8 95.1 96.3 97.7 98.8 99.1 99.1 99.4 99.4 99.6 99.7 99.7 100.0 100.0 100.0 GE 100 86.7 95.1 96.3 97.7 99.1 99.4 99.4 99.6 99.7 99.7 100.0 100.0 100.0 88.8 98.8 99.1 GE 000 86.7 88.8 95.1 96.3 97.7 98.8 99.1 99.4 99.4 99.6 99.7 99.7 100.0 100.0 100.0

TOTAL NUMBER OF OBSERVATIONS 930

D - 2 - 44

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PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 MONTH: MAY HOURS: ALL LST TO UTC: - 1 VISIBILITY IN METERS CEILING GE GB GE GE GE GE GR GE GR GE GR Œ GR Œ GE GR IN 112 FEET 90 80 50 48 40 32 24 20 16 12 10 08 06 04 00 33.7 34.5 36.5 36.9 37.5 37.6 37.7 37.8 37.9 37.9 37.9 37.9 38.0 38.0 38.0 38.1 NO CEIL GR 20000 40.0 39.0 42.4 42.8 43.5 43.6 43.8 43.9 44.0 44.1 44.1 44.1 44.1 44.2 44.2 44.2 39.2 44.1 44.2 44.3 44.3 44.3 44.4 GE 18000 40.1 42.5 43.0 43.7 43.8 44.0 44.2 44.3 44.4 44.2 44.3 44.3 44.4 44.4 44.4 GR 16000 39.2 40.2 42.5 43.0 43.8 44.0 44.1 44.2 44.3 43.7 GE 14000 39.2 40.2 42.6 43.1 43.8 43.9 44.0 44.2 44.2 44.3 44.4 44.4 44.4 44.4 44.5 44.5 GE 12000 39.6 40.6 43.0 43.5 44.2 44.3 44.5 44.6 44.7 44.8 44.8 44.8 44.8 44.9 44.9 44.9 GE 10000 48.7 48.7 48.8 42.6 43.7 46.6 47.2 48.0 48.1 48.4 48.5 48.6 48.7 48.8 49.8 49.9 50.1 50.1 50.2 50.2 50.3 Œ 9000 43.7 44.8 47.8 48.4 49.4 49.5 50.0 50.3 50.3 Œ 8000 47.6 48.8 52.1 52.7 53.8 53.9 54.2 54.4 54.4 54.5 54.6 54.6 54.7 54.7 54.7 54.8 7000 Œ 48.4 49.6 53.1 53.7 54.8 55.0 55.2 55.4 55.5 55.6 55.6 55.6 55.7 55.7 55.8 55.8 Œ 6000 48.7 55.8 56.0 56.0 56.0 56.1 56.1 49.9 53.4 54.1 55.1 55.3 55.6 55.8 56.2 56.2 5000 50.9 52.2 57.8 58.7 58.7 Œ 56.0 56.7 58.0 58.3 58.5 58.6 58.7 58.8 58.8 58.9 58.9 4500 Œ 52.9 54.3 58.3 59.0 60.3 60.6 60.9 61.1 61.2 61.3 61.4 61.4 61.4 61 5 61.5 61.6 4000 57.5 67.1 67.2 Œ 59.0 63.7 64.4 65.9 66.2 66.6 66.8 66.9 67.0 67.1 67.2 67.3 67.3 3500 68.7 72.4 72.7 Œ 62.1 63.7 69.6 71.9 72.2 72.3 72.5 72.5 72.6 72.8 72.8 71.2 71.5 GK 3000 66.9 68.5 74.1 75.1 76.8 77.2 77.8 78.1 78.2 78.4 78.5 78.5 78.6 78.7 78.8 78.8 Œ 2500 69.0 70.8 76.5 77.6 79.4 79.9 80.5 80.8 80.9 81.1 81.3 81.3 81.4 81.4 81.5 81.6 2000 Œ 71.7 73.5 79.7 80.9 82.8 83.2 83.9 84.2 84.4 84.6 84.7 84.7 84.8 84.9 85.0 85.0 72.5 85.8 Œ 1800 74.3 80.8 81.9 83.9 84.4 85.0 85.4 85.5 85.9 85.9 86.0 86.1 86.2 86.2 Œ 1500 75.0 76.9 83.9 85.1 87.3 87.9 88.6 89.1 89.2 89.5 89.6 89.6 89.7 89.8 89.9 89.9 92.8 GE 1200 76.8 78.7 86.2 87.6 89.9 90.5 91.3 91.8 92.1 92.3 92.4 92.5 92.6 92.6 92.7 Œ 1000 77.8 79.7 87.7 89.3 91.9 92.6 93.7 94.2 94.5 94.8 94.9 95.0 95.1 95.1 95.2 95.3 900 77.9 79.9 88.0 89.7 95.0 95.3 95.6 95.7 95.8 95.9 96.0 96.1 Œ 92.5 93.3 94.4 96.1 78.1 GE 800 80.1 88.4 90.1 93.0 93.8 94.9 95.6 95.8 96.1 96.3 96.3 96.5 96.6 96.7 96.7 Œ 700 78.3 80.2 96.5 96.9 97.0 97.1 97.2 97.3 88.7 90.6 93.5 94.4 95.6 96.2 97.4 97.5 97.7 Œ 600 l 78.4 80.4 89.0 90.9 96.9 97.2 97.6 97.8 97.9 98.1 94.0 95.0 96.2 98.2 98.2 78.6 80.6 97.7 98.1 98.3 98.4 98.5 98.7 Œ 500 89.2 91.2 94.4 95.4 96.7 97.4 98.8 98.8 GE 400 78.7 80.6 89.3 91.3 94.5 95.5 96.9 97.6 98.0 98.5 98.7 98.8 99.0 99.1 99.2 99.3 Œ 300 78.7 80.6 89.4 91.3 94.5 95.6 97.0 97.8 98.2 98.7 99.0 99.1 99.2 99.4 99.5 99.6 78.7 97.9 98.8 Œ 200 80.6 89.4 91.3 94.5 95.6 97.0 98.3 99.1 99.2 99.4 99.6 99.7 99.8 Œ 100 78.7 80.6 89.4 91.3 94.5 95.6 97.0 97.9 98.3 98.8 99.1 99.2 99.4 99.7 99.8 100.0 000 78.7 80.6 89.4 91.3 94.5 95.6 97.0 97.9 98.3 98.8 99.1 99.2 99.4 99.7 99.8 100.0

TOTAL NUMBER OF OBSERVATIONS 7440

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PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 MONTH: JUN HOURS: 00-02 LST TO UTC: - 1 CRILING VISIBILITY IN METERS GR GR. GR Œ GR. GR. GR GR TN GR GR GR GR GR GR CR GR FEET 112 90 80 60 48 40 32 24 20 16 12 10 80 06 04 00 NO CEIL 40.1 44.7 45.0 46.1 46.1 46.6 46.7 46.8 46.8 46.9 46.9 46.9 47.0 47.0 41.1 GE 20000 45.4 49.9 50.3 51.6 51.6 52.1 52.2 52.3 52.3 52.4 52.4 52.4 52.6 52.6 52.8 45.4 52.1 52.3 52.4 52.6 GE 18000 44.4 49.9 50.3 52.2 52.3 52.4 52.4 52.6 52.8 51.6 51.6 GE 16000 44.4 45.4 49.9 50.3 51.6 51.6 52.1 52.2 52.3 52.3 52.4 52.4 52.4 52.6 52.6 52.8 GR 14000 44.4 45.4 49.9 50.3 51.6 51.6 52.1 52.2 52.3 52.3 52.4 52.4 52.4 52.6 52.6 52.8 GR 12000 44.8 50.3 52.6 52.7 52.8 52.8 52.9 52.9 52.9 53.0 53.0 45.8 50.8 52.0 52.0 53.2 GE 10000 47.9 48.9 53.9 54.3 55.8 55.8 56.3 56.4 56.6 56.7 56.8 56.8 56.8 56.9 56.9 57.1 GR 9000 48.8 49.8 55.0 55.4 56.9 56.9 57.4 57.6 57.7 57.8 57.9 57.9 57.9 58.0 58.0 58.2 GR 8000 52.7 53.7 59.2 59.7 61.2 61.2 61.8 61.9 62.0 62.1 62.2 62.2 62.2 62.3 62.3 62.6 GE 7000 61.0 61.4 63.0 63.6 63.7 63.8 63.9 64.0 64.0 64.0 64.1 54.4 55.4 63.0 64.1 64.3 GE 6000 54.7 55.9 61.4 61.9 63.4 63.4 64.0 64.1 64.2 64.3 64.4 64.4 64.4 64.6 64.6 GE 5000 57.3 58.7 64.4 64.9 66.4 66.4 67.0 67.1 67.2 67.3 67.4 67.4 67.4 67.6 67.6 67.8 GE 4500 61.2 62.7 68.7 69.2 71.1 71.1 72.0 72.1 72.2 72.4 72.6 72.6 72.6 72.7 72.7 72.9 GR 4000 65.8 76.4 77.4 77.6 77.8 77.9 78.1 78.2 67.3 73.6 74.1 76.3 77.3 77.9 78.2 78.4 GE 3500 69.0 70.9 77.2 78.0 80.2 80.3 81.2 81.3 81.4 81.7 81.8 81.8 82.0 82.1 82.1 82.3 GE 3000 71.4 73.3 83.7 85.1 85.2 85.4 85.6 85.6 85.8 80.4 81.4 83.8 84.7 85.9 85.9 86.1 GE 2500 72.1 74.0 81.3 82.4 84.7 84.8 85.7 86.1 86.2 86.4 86.6 86.6 86.8 86.9 86.9 87.1 GE 2000 73.8 75.7 83.1 84.2 86.4 86.7 87.8 88.2 88.3 88.6 88.7 88.7 88.9 89.0 89.0 89.2 GE 1800 88.4 88.8 88.9 88.6 73.9 75.8 83.3 84.4 86.7 86.9 88.0 88.9 89.1 89.2 89.2 89.4 GE 1500 76.0 77.9 85.7 86.8 89.0 89.2 90.3 90.9 91.0 91.2 91.3 91.3 91.6 91.7 91.7 91.9 76.9 92.2 GE 1200 78.8 86.7 87.8 90.1 90.3 91.6 92.1 92.4 92.6 92.6 92.8 92.9 92.9 93.1 GE 1000 78.3 80.2 88.4 89.7 92.0 94.0 94.1 94.4 92.2 93.4 94.3 94.4 94.7 94.8 94.8 95.0 95.0 95.2 GR 900 78.8 80.7 89.0 90.2 92.6 92.8 94.0 94.6 94.7 94.9 95.0 95.3 95.3 95.6 GE 800 78.8 80.7 89.0 90.2 92.7 92.9 94.1 94.7 94.8 95.0 95.1 95.1 95.3 95.4 95.4 95.7 GE 79.6 95.2 95.8 95.9 96.2 96.4 700 81.4 90.1 91.3 93.8 94.0 96.1 96.2 96.6 96.6 96.8 GE 600 79.8 81.7 90.3 91.7 94.1 94.4 95.7 96.3 96.4 96.7 96.8 96.8 97.0 97.1 97.1 97.3 GR 500 80.1 82.0 90.8 92.1 94.9 95.2 96.4 97.1 97.2 97.6 97.7 97.7 97.9 98.0 98.0 98.2 GE 400 80.3 82.2 91.1 92.4 95.3 95.9 97.1 97.8 97.9 98.2 98.3 98.3 98.6 98.7 98.7 98.9 80.3 91.1 92.4 95.3 95.9 97.1 97.9 98.0 98.4 98.6 98.5 98.8 98.9 98.9 GR 300 82.2 99.1 GE 200 80.3 82.2 91.1 92.4 95.3 95.9 97.2 98.0 98.1 98.6 98.7 98.8 99.0 99.1 99.2 99.4 GR 100 80.3 82.2 91.1 92.4 95.3 95.9 97.2 98.0 98.1 98.6 98.7 98.8 99.0 99.1 99.2 100.0 000 80.3 82.2 91.1 92.4 95.3 95.9 97.2 98.0 98.1 98.6 98.7 98.8 99.0 99.1 99.2 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM BOURLY OBSERVATIONS

PERIOD OF RECORD: JAN 80 - DEC 89 STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY LST TO UTC: - 1 MONTH: JUN HOURS: 03-05 CRILING VISIBILITY IN METERS IN GE Œ GR GR GE GE GE GE GR GE GR GR GE GR GR GR 112 90 FRRT 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 24.2 24.8 31.0 32.2 35.0 35.6 36.6 37.4 37.7 37.9 37.9 38.0 38.0 38.2 38.3 38.7 GE 20000 27.0 27.6 34.3 35.8 39.3 39.9 41.2 42.2 42.4 42.8 42.9 43.0 43.0 43.2 43.3 43.7 GE 18000 27.0 27.6 34.3 35.8 39.3 39.9 41.2 42.2 42.4 42.8 42.9 43.0 43.0 43.3 43.2 43.7 GR 16000 27.0 27.6 34.3 39.3 42.2 42.4 42.8 42.9 43.3 35.8 39.9 41.2 43.0 43.0 43.2 43.7 GE 14000 27.0 27.6 34.3 35.8 39.3 39.9 41.2 42.2 42.4 42.8 42.9 43.0 43.0 43.2 43.3 43.7 GR 12000 27.2 27.8 34.6 36.0 39.6 40.2 41.6 42.6 42.8 43.1 43.2 43.3 43.3 43.6 43.7 44.0 GE 10000 28.8 29.3 36.6 38.3 42.3 43.2 44.8 45.8 46.0 46.4 46.6 46.7 46.7 47.0 47.1 47.7 45.3 48.1 49.2 GR 9000 30.1 30.7 38.6 40.3 47.9 48.6 48.7 48.8 48.8 49.1 49.8 44.4 46.9 Œ 8000 33.6 34.2 42.4 44.2 48.4 49.3 51.0 52.0 52.2 52.7 52.8 52.9 52.9 53.2 53.3 53.9 GE 7000 34.9 43.2 49.2 52.9 53.1 53.6 53.7 53.8 53.8 54.2 34.2 45.0 50.1 51.8 54.1 54.8 54.6 GR 6000 34.6 35.2 49.6 43.6 45.3 50.4 52.1 53.2 53.4 53.9 54.0 54.1 54.1 54.4 55.1 37.6 GR 5000 47.9 56.1 56.6 56.8 57.2 57.3 36.8 46.0 52.1 53.1 54.8 55.9 56.9 56.9 58.1 4500 GR 38.8 39.6 48.8 50.7 55.4 56.6 58.4 59.6 59.8 60.2 60.4 60.6 60.6 60.9 61.0 61.8 GE 4000 41.7 42.4 52.7 54.7 59.8 60.9 62.9 64.1 64.4 64.9 65.1 65.2 65.2 65.6 65.7 66.6 69.3 GR 3500 44.1 45.0 55.8 57.8 63.2 64.3 66.3 67.8 68.1 68.6 68.8 68.9 68.9 69.2 70.2 GR 3000 48.0 48.9 60.7 63.3 68.9 70.2 72.3 74.0 74.3 74.9 75.1 75.2 75.2 75.7 76.6 GB 2500 49.2 50.2 62.2 65.0 70.6 71.9 74.1 75.8 76.1 76.8 77.0 77.1 77.1 77.4 77.6 78.4 79.2 GE 2000 50.8 51.8 63.9 66.7 72.6 73.9 76.2 77.9 78.2 78.9 79.1 79.2 79.6 79.7 80.6 GR 1800 67.4 77.0 79.0 51.3 78.7 79.7 79.9 80.0 80.4 52.3 64.7 73.3 74.7 80.0 80.3 81.3 Œ 1500 53.1 54.1 66.9 69.7 75.9 77.2 79.6 81.2 81.6 82.2 82.4 82.6 82.6 82.9 83.0 83.9 GE 1200 54.7 55.7 68.8 77.9 79.2 83.8 84.4 71.6 81.8 83.4 84.7 84.8 84.8 85.1 85.2 86.1 GE 1000 56.1 57.1 70.7 73.4 80.0 81.3 83.9 85.6 85.9 86.6 86.8 86.9 86.9 87.2 87.3 88.2 56.7 57.8 87.2 87.9 88.1 Œ 900 71.8 74.7 81.2 82.6 85.1 86.9 88.2 88.2 88.6 88.7 89.6 800 Œ 57.4 58.6 72.9 75.8 82.4 84.0 86.7 88.4 88.8 89.4 89.7 89.8 89.8 90.1 90.2 91.1 90.3 91.1 90.9 91.7 Œ 700 58.2 59.3 74.0 77.0 83.9 85.4 88.1 90.0 91.3 91.9 91.4 91.4 91.8 92.8 600 77.6 Œ 58.7 59.8 74.6 84.4 86.0 88.7 90.6 90.9 91.7 92.0 92.1 92.1 92.4 92.6 93.4 Œ 500 58.8 59.9 74.9 78.1 85.3 89.7 91.7 32.0 92.8 93.3 93.4 86.9 93.4 93.8 93.9 94.8 Œ 400 59.0 60.1 75.1 78.4 85.8 87.6 90.6 92.6 93.4 94.4 95.0 95.1 95.2 95.6 95.8 96.7 GE 300 59.0 60.1 75.1 78.7 86.1 88.0 93.2 94.1 95.2 95.8 95.9 96.7 97.7 91.0 96.0 96.3 Œ 200 59.0 60.1 75.1 78.9 86.3 88.2 91.3 93.7 94.6 96.0 96.6 96.8 96.9 97.2 97.6 98.9 59.0 Œ 100 60.1 75.1 78.9 86.3 88.2 91.3 93.7 94.6 96.0 96.7 97.0 97.1 97.4 97.8 99.8 QR 000 59.0 60.1 75.1 78.9 86.3 88.2 91.3 93.7 94.6 96.0 96.7 97.1 97.2 97.6 98.0 100.0

TOTAL NUMBER OF OBSERVATIONS 900

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: JUN HOURS: 06-08

			LST	TO UTC	: - 1					MONTH:	JUN	HOURS:	06-08			
CEILING		•••••	• • • • • • •		••••••	VISIBIL	ITY IN	METERS	• • • • • •	•••••	• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	•••••
IN	GE	GE	Œ	GE	GB	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE
FEET	112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
• • • • • • •	• • • • • • • •															
NO CEIL	18.8	19.3	25.9	26.6	29.0	29.9	30.4	31.4	31.6	31.6	31.7	31.7	31.7	31.9	31.9	32.1
GE 2000	21.9	22.4	30.0	30.9	34.0	35.1	36.1	37.4	37.8	37.9	38.1	38.1	38.1	38.3	38.4	39.0
GE 1800		22.4	30.0	30.9	34.0	35.1	36.1	37.4	37.8	37.9	38.1	38.1	38.1	38.3	38.4	39.0
GE 1600		22.4	30.0	30.9	34.0	35.1	36.1	37.4	37.8	37.9	38.1	38.1	38.1	38.3	38.4	39.0
GE 1400		22.7	30.3	31.3	34.6	35.7	36.7	38.0	38.3	38.4	38.7	38.7	38.7	38.9	39.0	39.6
GE 1200		22.9	30.7	31.7	35.1	36.2	37.2	38.6	38.9	39.0	39.2	39.2	39.2	39.4	39.6	40.1
								****		•••						
GE 1000	24.9	25.4	33.4	34.4	38.3	39.8	40.8	42.4	42.9	43.4	43.7	43.7	43.7	44.0	44.1	44.7
GE 900	25.9	26.6	34.9	36.0	40.1	41.6	42.7	44.3	44.8	45.3	45.6	45.6	45.6	45.9	46.0	46.7
GE 800	28.2	28.9	37.9	39.1	43.6	45.1	46.2	47.9	48.4	49.0	49.2	49.2	49.2	49.6	49.7	50.3
GE 700	28.8	29.4	38.7	40.0	44.7	46.3	47.4	49.2	49.8	50.3	50.6	50.6	50.6	50.9	51.0	51.7
GE 600	28.8	29.4	38.7	40.0	44.8	46.4	47.6	49.4	50.0	50.7	50.9	50.9	50.9	51.2	51.3	52.0
GE 500	29.7	30.4	40.0	41.7	46.7	48.4	49.8	51.7	52.2	52.9	53.1	53.1	53.1	53.4	53.6	54.2
GE 450	0 31.1	31.9	41.7	43.6	48.7	50.8	52.1	54.0	54.6	55.2	55.4	55.4	55.4	55.8	55.9	56.6
GE 400	33.8	34.7	44.8	46.8	52.0	54.1	55.4	57.7	58.3	59.0	59.3	59.3	59.3	59.7	59.8	60.4
GE 350	36.0	36.9	47.7	49.7	55.1	57.2	58.6	61.2	61.9	62.6	62.9	62.9	62.9	63.2	63.3	64.0
GE 300	39.0	39.9	52.0	54.1	60.3	62.7	64.0	66.7	67.4	68.2	68.6	68.6	68.6	68.9	69.0	69.7
GE 250		41.0	53.2	55.3	61.7	64.0	65.4	68.1	68.9	69.7	70.0	70.0	70.0	70.3	70.4	71.1
GE 200	1	43.1	55.6	57.9	54.6	67.0	68.4	71.1	71.9	72.7	73.0	73.0	73.0	73.3	73.4	74.1
GE 180	1	43.7	56.2	58.6	65.4	68.0	69.4	72.2	73.0	73.8	74.1	74.1	74.1	74.4	74.6	75.2
GE 150		45.8	59.3	62.2	69.4	72.0	73.4	76.2	77.2	78.0	78.3	78.3	78.3	78.7	78.8	79.4
GE 120	0 46.3	47.2	61.1	64.1	71.4	74.1	75.8	78.6	79.6	80.3	80.7	80.8	80.8	81.1	81.2	81.9
GE 100		49.1	63.2	66.3	73.8	76.6	78.4	81.4	82.4	83.2	83.6	83.7	83.7	84.0	84.1	84.8
GE 90		50.3	65.1	68.3	75.9	78.7	80.6	83.6	84.6	85.3	85.7	85.8	85.8	86.1	86.2	86.9
GE 80		51.1	66.4	69.8	77.3	80.1	82.0	85.1	86.1	86.9	87.2	87.3	87.3	87.7	87.8	88.4
GE 70	1	51.8	67.6	70.9	78.8	81.7	83.7	86.9	87.9	88.7	89.0	89.1	89.1	89.4	89.6	90.2
GE 60	51.0	52.0	68.2	71.9	80.0	82.9	84.9	88.1	89.2	90.0	90.3	90.4	90.6	90.9	91.0	91.7
GE 50	51.6	52.6	69.2	73.0	81.2	84.2	86.3	89.7	90.8	91.7	92.0	92.2	92.3	92.8	02.0	93.6
GE 40															92.9	
GE 40		52.8	69.7	73.4	81.9 82.1	85.4 85.8	87.8	91.8 92.2	93.3	94.3 95.2	94.9	95.1 96.2	95.2	95.7	95.8	96.6
GE 20	-	52.8 52.8	69.9 69.9	73.7 73.7	82.1	85.8 85.8	98.1 98.1	92.2	93.9 93.9	95.2 95.3	96.0 96.2	96.2 96.6	96.6 97.0	97.1 97.7	97.4	98.3 99.6
GE 20	- 1	52.8	69.9	73.7	82.1	85.8	88.1	92.2	93.9	95.3	96.2	96.5	97.0	97.7	98.1 98.3	100.0
45 10	31.8	34.5	U7.7	13.1	02.1	03.0	00.1	74.6	34.U	73.4	5 0.3	30. /	21.1	97.0	70.3	100.0
GE 00	51.8	52.8	69.9	73.7	82.1	85.8	88.1	92.2	94.0	95.4	96.3	96.7	97.1	97.8	98.3	100.0
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TOTAL NUMBER OF OBSERVATIONS 900

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: JUN HOURS: 09-11

				LST	10 010	: - 1					MUNIN:	JUN	HOOKS:	09-11			
CEI	LING	• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • • • • • • • • • • • • • • •	VISIBIL:	ITY IN I	METERS	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •		•••••
	n l	GE	GE	GR	GE	GE	GE	GE	GE	GE	Œ	GE	GE	GE	Œ	GE	GE
	ET	112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
•••	•••••			•••••		• • • • • • •	• • • • • • •	• • • • • • •	•••••	• • • • • • • • • • • • • • • • • • • •	•••••	••••			•••••		
								30 B	20.7		20.0	20.0		20.0	20.0		
MO	CEIL	29.0	29.8	31.3	31.6	32.4	32.6	32.7	32.7	32.7	32.8	32.8	32.8	32.8	32.8	32.8	32.8
	20000	34.0	34.9	37.1	37.6	38.8	39.1	39.6	39.6	39.7	39.8	39.8	39.8	39.8	39.8	39.8	39.8
	18000	34.0	34.9	37.1	37.6	38.8	39.1	39.6	39.6	39.7	39.8	39.8	39.8	39.8	39.8	39.8	39.8
	16000	34.0	34.9	37.1	37.6	38.8	39.1	39.6	39.6	39.7	39.8	39.8	39.8	39.8	39.8	39.8	39.8
	14000	34.6	35.4	37.8	38.2	39.4	39.8	40.2	40.2	40.3	40.4	40.4	40.4	40.4	40.4	40.4	40.4
Œ	12000	35.0	35.9	38.4	38.9	40.1	40.4	40.9	40.9	41.0	41.1	41.1	41.1	41.1	41.1	41.1	41.1
GE	10000	36.3	37.4	40.3	41.1	42.3	42.7	43.2	43.2	43.3	43.6	43.6	43.6	43.6	43.7	43.7	43.7
Œ	9000	36.9	38.0	41.1	41.9	43.1	43.4	44.0	44.0	44.1	44.3	44.3	44.3	44.3	44.4	44.4	44.4
GE	8000	37.8	38.9	42.8	43.6	44.8	45.1	45.7	45.7	45.8	46.0	46.0	46.0	46.0	46.1	46.1	46.1
Œ	7000	38.4	39.6	43.4	44.2	45.4	45.9	46.4	46.4	46.6	46.8	46.8	46.8	46.8	46.9	46.9	46.9
GE	6000	38.7	39.8	43.8	44.6	45.8	46.2	46.8	46.8	46.9	47.1	47.1	47.1	47.1	47.2	47.2	47.2
GE	5000	39.7	40.8	45.2	46.0	47.2	47.7	48.2	48.2	48.3	48.6	48.6	48.6	48.6	48.7	48.7	48.7
GE	4500	41.4	42.6	47.2	48.1	49.4	49.9	50.4	50.4	50.6	50.8	50.8	50.8	50.8	50.9	50.9	50.9
	4000																
GE	3500	44.0	45.1	49.8	50.7	52.0	52.4 56.7	53.0	53.0	53.1	53.3	53.3	53.3 57.6	53.3	53.4	53.4	53.4
			48.9	53.8	54.8	56.2		57.2	57.2	57.3	57.6	57.6		57.6	57.7	57.7	57.7
GE	3000	55.8	57.2	62.8	64.3	66.4	66.9	67.6	67.6	67.7	67.9	67.9	67.9	67.9	68.0	68.0	68.0
Œ	2500	57.8	59.3	65.1	66.7	68.8	69.2	70.0	70.0	70.1	70.3	70.3	70.3	70.3	70.4	70.4	70.4
GE	2000	62.6	64.1	71.1	72.9	75.1	75.6	76.3	76.3	76.4	76.7	76.7	76.7	76.7	76.8	76.8	76.8
Œ	1800	63.6	65.1	72.2	74.0	76.2	76.7	77.4	77.4	77.6	77.8	77.8	77.8	77.8	77.9	77.9	77.9
GE	1500	66.4	68.0	76.6	78.4	80.8	81.2	82.1	82.1	82.3	82.6	82.6	82.6	82.6	82.7	82.7	82.7
Œ	1200	70.8	72.3	82.0	84.1	86.7	87.1	88.0	88.0	88.2	88.4	88.4	88.4	88.4	88.6	88.6	88.6
GE	1000	72.0	73.6	84.0	86.1	88.7	89.2	90.1	90.2	90.4	90.7	90.7	90.7	90.7	90.8	90.8	90.8
GE	900	73.1	74.7	85.4	87.6	90.2	90.9	91.8	92.0	92.2	92.4	92.4	92.4	92.4	92.6	92.6	92.6
GE	800	73.8	75.3	86.9	89.0	91.8	92.4	93.4	93.8	94.0	94.2	94.2	94.2	94.2	94.3	94.3	94.3
Œ	700	73.9	75.4	87.6	89.8	92.7	93.3	94.3	94.7	95.0	95.3	95.3	95.3	95.3	95.4	95.4	95.4
Œ	600	74.4	76.0	88.6	90.8	93.8	94.8	95.9	96.4	96.8	97.4	97.6	97.6	97.6	97.7	97.7	97.7
Œ	500	74.7	76.2	88.9	91.1	94.1	95.2	96.3	96.9	97.2	97.9	98.0	98.0	98.0	98.1	98.1	98.1
GE	400	74.7	76.2	88.9	91.1	94.2	95.4	96.8	97.4	97.9	98.6	98.7	98.8	98.8	99.0	99.0	99.0
Œ	300	74.7	76.2	88.9	91.1	94.2	95.4	96.9	97.6	98.1	98.9	99.1	99.2	99.2	99.4	99.4	99.4
GE	200	74.7	76.2	88.9	91.1	94.2	95.4	96.9	97.8	98.3	99.1	99.3	99.4	99.4	99.9	99.9	99.9
GE	100	74.7	76.2	88.9	91.1	94.2	95.4	96.9	97.8	98.3	99.1	99.3	99.4	99.4	99.9	99.9	99.9
GE	000	74.7	76.2	88.9	91.1	94.2	95.4	96.9	97.8	98.3	99.1	99.3	99.6	99.6	100.0	100.0	100.0

OPERATING LOCATION "A" PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY USAFETAC, ASHEVILLE NC PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY USAFETAC, ASHEVILLE NC

STA	TION 1	NUMBER:	106070		TO UTC:		ndahlem	AB/GERI	ANY		PERIOD MONTH:		ORD: J		DEC 89		
OPT	TTMO	• • • • • • •	• • • • • • •	•••••	• • • • • •	• • • • • • •				• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • •	• • • • • •
	LING N	l GDE	GE	GE	GE	GE	VISIBIL: GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE
	ET	112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
					• • • • • • •												
		1															
NO	CEIL	26.8	27.6	27.8	28.1	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9
	20000	33.4	34.3	35.0	35.4	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6
	18000 16000	33.4	34.3	35.0	35.4	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6
	14000	33.4 33.9	34.3 34.8	35.0 35.4	35.4 35.9	36.6 37.0	36.6 37.0	36.6 37.0	36.6 37.0	36.6 37.0	36.6 37.0	36.6 37.0	36.6 37.0	36.6 37.0	36.6 37.0	36.6 37.0	36.6 37.0
	12000	34.2	35.1	35.4	36.2	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
GE	12000	34.2	33.1	33.0	30.2	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
GE	10000	36.9	38.0	39.0	39.4	40.6	40.6	40.6	40.6	40.6	40.6	40.6	40.6	40.6	40.6	40.6	40.6
GE	9000	37.6	38.8	39.8	40.2	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
GE	8000	40.2	41.4	43.0	43.4	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6
GE	7000	40.8	42.0	43.6	44.0	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1
GE	6000	41.0	42.2	43.8	44.2	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3
GE	5000	43.4	44.8	46.6	47.0	48.2	48.2	48.2	48 2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2
GE	4500	46.1	47.4	49.3	49.8	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
GE	4000	53.2	54.7	56.7	11:	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4
GE	3500	60.4	61.9	64.2	64 .8	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
GE	3000	70.4	72.0	7'.0	75.7	77.1	77.1	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2
GE	2500	75.8	77.3	80.9	81.6	83.0	83.0	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1
GE	2000	80.7	82.3	86.0	86.7	88.3	88.4	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6
GE	1800	ı	83.3	87.1	87.8	89.4	89.6	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
GE	1500	83.9	85.8	90.1	90.9	92.7	92.8	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0
GE	1200	85.4	87.4	91.9	92.7	94.4	94.6	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
GE	1000	86.7	88.7	93.6	94.3	96.3	96.4	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE	900	86.8	88.8	94.2	95.1	97.1	97.2	97.6	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
GE	800	86.9	88.9	94.4	95.4	97.4	97.7	98.0	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2
GE	700		89.0	94.8	95.8	97.8	98.0	98.3	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
GE	600	87.1	89.1	95.3	96.3	98.4	98.8	99.1	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
		Í															
GE	500		89.1	95.7	96.7	98.8	99.1	99.4	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
GE	400		89.1	95.7	96.7	98.8	99.1	99,4	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
GE	300 200		89.1 89.1	95.7 95.7	96.7 96.7	98.8 98.8	99.1 99.1	99.4 99.4	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0
GE	100		89.1	95.7	96.7	98.8	99.1	99.4	99.8	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0
45	100	87.1	03.1	33.1	30.7	70.0	33.1	27.4	22.0	22.3	33.3	77.7	100.0	100.0	100.0	100.0	100.0
GB	000	87.1	89.1	95.7	96.7	98.8	99.1	99.4	99.8	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0
																	

TOTAL NUMBER OF OBSERVATIONS 900

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTE: JUN HOURS: 15-17

				LST	TO UTC	: - 1					MONTH:	JUN	HOURS:	15-17			
CEI	LING	•••••	• • • • • •	•••••	• • • • • • •	••••••	VISIBIL	ITY IN	METERS	• • • • • •	• • • • • •	•••••	• • • • • •	• • • • • • •	•••••	•••••	•••••
I	n	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	Œ
FE	et	112	90	80	60	48	40	32	24	20	16	12	10	80	06	04	00
• • •	•••••	• • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • •		• • • • • •	• • • • • •		• • • • • •	• • • • • • •	• • • • • •	•••••	• • • • • •
Ю	CEIL	27.9	28.7	29.7	30.1	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6
Œ	20000	34.7	35.6	36.6	37.0	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6
Œ	18000	34.9	35.8	36.8	37.2	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8
Œ	16000	34.9	35.8	36.8	37.2	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8
Œ	14000	34.9	35.8	36.8	37.2	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8
Œ	12000	35.6	36.4	37.4	37.9	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4
GE	10000	39.0	39.9	41.4	42.1	42.7	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8
GE	9000	39.9	40.8	42.3	43.0	43.6	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7
GE	8000	45.3	46.2	47.9	48.7	49.2	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
Œ	7000	47.0	47.9	49.6	50.3	50.9	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
Œ	6000	47.7	48.7	50.3	51.2	51.8	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9
						32.0		52.75	5215	5215		02.5			0203		32.5
GE	5000	51.0	52.0	54.0	54.9	55.4	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6
Œ	4500	55.2	56.2	58.3	59.2	59.8	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9
GB	4000	63.6	64.6	66.9	67.8	68.3	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
Œ	3500	71.1	72.2	75.0	75.9	76.4	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6
Œ	3000	79.2	80.4	84.0	85.0	85.7	85.8	85.8	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
Œ	2500	82.6	83.9	87.7	88.7	89.4	89.6	89.6	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8
Œ	2000	85.7	87.0	90.9	91.9	92.7	92.8	92.8	93.0	93.0	93.0	93.1	93.1	93.1	93.1	93.1	93.1
GE	1800	85.7	87.0	91.1	92.1	92.9	93.0	93.0	93.2	93.2	93.2	93.3	93.3	93.3	93.3	93.3	93.3
Œ	1500	87.2	88.6	93.4	94.6	95.3	95.4	95.4	95.8	95.9	95.9	96.0	96.0	96.0	96.0	96.0	96.0
Œ	1200	88.2	89.6	94.7	95.8	96.6	96.7	96.7	97.0	97.1	97.1	97.2	97.2	97.2	97.2	97.2	97.2
GE	1000	88.8	90.1	95.6	96.9	97.7	97.8	97.9	98.2	98.3	98.3	98.4	98.4	98.4	98.4	98.4	98.4
GE	900	88.9	90.2	95.8	97.1	97.9	98.0			_	98.6	98.7	98.7	98.7	98.7	98.7	98.7
GE	800	89.0			97.1	98.0		98.1	98.4	98.6			98.8				
		89.2	90.3	95.9			98.1	98.2	98.6	98.7	98.7	98.8		98.8	98.8	98.8	98.8
ge ge	700 600	89.2	90.6 90.7	96.2 96.8	97.6 98.1	98.3 98.9	98.4 99.0	98.6	98.9 99.4	99.0 99.6	99.0 99.6	99.1 99.7	99.1 99.7	99.1 99.7	99.1 99.7	99.1 99.7	99.1 99.7
GE	800	09.3	90.7	90.0	90.1	96.9	99.0	99.1	99.4	99.0	99.0	39.7	99.7	99.7	99.7	99.7	99.7
Œ	500	89.3	90.7	96.9	98.2	99.1	99.3	99.4	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
Œ	400	89.3	90.7	96.9	98.2	99.1	99.3	99.4	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
Œ	300	89.3	90.7	96.9	98.2	99.1	99.3	99.4	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
Œ	200	89.3	90.7	96.9	98.2	99.1	99.3	99.4	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
GE	100	89.3	90.7	96.9	98.2	99.1	99.3	99.4	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
_			• •	••			** -										
Œ	000	89.3	90.7	96.9	98.2	99.1	99.3	99.4	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 900

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: JAN 80 - DEC 89 STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY LST TO UTC: - 1 MONTH: JUN HOURS: 18-20 CRILING VISIBILITY IN METERS IN Œ GE Œ GE GE GE GE GE GE GE GR GE Œ GR GR GE 112 32 24 20 16 80 04 00 FEET 90 80 60 48 12 10 06 40 NO CEIL 34.2 34.9 35.9 36.0 36.2 36.2 36.2 36.2 36.2 36.2 36.2 36.2 36.2 36.2 36.2 36.2 45.4 45.4 GE 20000 42.9 45.4 45.4 45.4 45.4 45.4 45.4 45.4 45.4 45.4 41.9 44.3 44.9 45.4 GE 18000 42.1 43.1 44.6 45.1 45.7 45.7 45.7 45.7 45.7 45.7 45.7 45.7 45.7 45.7 45.7 45.7 GE 16000 45.1 45.7 45.7 45.7 45.7 45.7 45.7 45.7 45.7 45.7 45.7 45.7 42.1 43.1 44.6 45.7 GE 14000 42.1 43.1 44.6 45.1 45.7 45.7 45.7 45.7 45.7 45.7 45.7 45.7 45.7 45.7 45.7 45.7 GE 12000 42.8 43.9 45.3 45.9 46.4 46.4 46.4 46.4 46.4 46.4 46.4 46.4 46.4 46.4 46.4 46.4 GE 10000 46.8 48.1 49.8 50.4 51.2 51.2 51.2 51.2 51.2 51.2 51.2 51.2 51.2 51.2 51.2 51.2 GE 9000 48.3 49.7 51.7 52.3 53.2 53.2 53.2 53.2 53.2 53.2 53.2 53.2 53.2 53.2 53.2 53.2 GR 8000 52.9 54.4 56.8 57.4 58.3 58.3 58.3 58.3 58.3 58.3 58.3 58.3 58.3 58.3 58.3 58.3 GE 7000 60.0 60.0 60.0 60.C 60.0 60.0 54.6 56.1 58.4 59.1 60.0 60.0 60.0 60.0 60.0 60.0 GR 6000 55.0 56.6 58.9 59.6 60.4 60.4 60.4 60.4 60.4 60.4 60.4 60.4 60.4 60.4 60.4 60.4 66.2 GE 5000 60.3 62.0 64.7 65.3 66.2 66.2 66.2 66.2 66.2 66.2 66.2 66.2 66.2 66.2 66.2 GR 4500 66.4 68.2 71.9 72 . R 72.8 72.8 72.8 72.8 72.R 72.8 72.8 72.8 72.8 71.2 72.8 72.8 4000 72.7 74.6 78.9 79.8 79.8 79.8 79.8 79.8 79.8 79.8 79.8 GE 78.1 79.8 79.8 79.8 79.8 3500 77.0 79.0 82.8 83.6 84.4 84.4 GE 84.4 84.4 84.4 84.4 84.4 84.4 84.4 84.4 84.4 84.4 GE 3000 81.3 83.3 87.7 88.4 89.7 89.7 89.7 89.7 89.7 89.7 89.7 89.7 89.7 89.7 89.7 89.7 GE 2500 82.4 84.6 89.3 90.1 91.3 91.3 91.4 91.4 91.4 91.4 91.4 91.4 91.4 91.4 91.4 91.4 2000 92.2 GE 83.8 86.1 91.3 93.6 93.6 93.7 93.7 93.7 93.8 93.8 93.8 93.8 93.8 93.8 93.8 1800 GE 84.1 86.4 92.1 93.0 94.3 94.3 94.4 94.4 94.4 94.6 94.6 94.6 94.6 94.6 94.6 94.6 GE 1500 84.3 86.7 93.4 94.3 95.7 95.8 95.9 95.9 95.9 96.0 96.0 96.0 96.0 96.0 96.0 96.0 GΕ 1200 85.3 87.7 94.9 95.8 97.1 97.2 97.3 97.3 97.3 97.4 97.4 97.4 97.4 97.4 97.4 97.4 GE 1000 86.0 88.3 95.6 96.6 97.9 98.0 98.2 98.2 98.2 98.3 98.3 98.3 98.3 98.3 98.3 98.3 95.9 96.9 98.8 98.8 98.8 98.9 98.9 98.9 GE 900 86.3 88.7 98.4 98.6 98.9 98.9 98.9 98.9 GE 800 86.6 88.9 96.1 97.1 98.7 98.8 99.0 99.0 99.0 99.1 99.1 99.1 99.1 99.1 99.1 99.1 GE 700 86.6 88.9 96.3 97.3 99.1 99.2 99.4 99.4 99.4 99.6 99.6 99.6 99.6 99.6 99.6 99.6 GE 600 86.6 88.9 96.6 97.7 99.4 99.6 99.8 99.8 99.8 99.9 99.9 99.9 99.9 99.9 99.9 99.9 88.9 97.7 99.7 99.9 99.9 99.9 100.0 100.0 100.0 100.0 100.0 100.0 GE 500 86.6 96.6 99.6 GE 400 86.6 88.9 96.6 97.7 99.6 99.7 99.9 99.9 99.9 100.0 100.0 100.0 100.0 100.0 100.0 100.0 GE 300 86.6 88.9 97.7 99.6 99.9 99.9 99.9 100.0 100.0 100.0 100.0 100.0 100.0 100.0 96.6 99.7 86.6 99.9 100.0 100.0 100.0 100.0 100.0 100.0 GE 200 88.9 96.6 97.7 99.6 99.7 99.9 99.9 GE 100 86.6 88.9 96.6 97.7 99.6 99.7 99.9 99.9 99.9 100.0 100.0 100.0 100.0 100.0 100.0 100.0 GE 000 86.6 88.9 96.6 97.7 99.6 99.7 99.9 99.9 99.9 100.0 100.0 100.0 100.0 100.0 100.0 100.0

TOTAL NUMBER OF OBSERVATIONS 900

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 MONTH: JUN HOURS: 21-23

				LST	TO UTC	: - 1					MONTH:	JUN	HOURS:	21-23			
CEI	LING	• • • • • •	• • • • • •	• • • • • •	• • • • • • •	•••••	VISIBIL	ITY IN	METERS	•••••			• • • • • •	• • • • • • •		•••••	• • • • • •
I	и	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE
FE	et	112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
•••			• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • •	• • • • • • •	• • • • • •	•••••	• • • • • • •	•••••		•••••	•••••
NO (CEIL	40.6	41.2	43.2	43.2	43.9	43.9	43.9	44.0	44.1	44.1	44.2	44.2	44.2	44.2	44.2	44.2
GE :	20000	46.9	47.6	49.8	49.8	51.0	51.0	51.2	51.3	51.4	51.4	51.6	51.6	51.6	51.6	51.6	51.6
GE :	18000	47.0	47.7	49.9	49.9	51.1	51.1	51.3	51.4	51.6	51.6	51.7	51.7	51.7	51.7	51.7	51.7
GE	16000	47.0	47.7	49.9	49.9	51.1	51.1	51.3	51.4	51.6	51.6	51.7	51.7	51.7	51.7	51.7	51.7
GE	14000	47.0	47.7	49.9	49.9	51.1	51.1	51.3	51.4	51.6	51.6	51.7	51.7	51.7	51.7	51.7	51.7
GE	12000	47.7	48.4	50.7	50.8	52.0	52.0	52.2	52.3	52.4	52.4	52.6	52.6	52.6	52.6	52.6	52.6
GE :	10000	52.1	52.9	55.6	55.7	57.0	57.0	57.2	57.3	57.4	57.4	57.8	57.8	57.8	57.8	57.8	57.8
GE	9000	53.9	54.8	57.6	57.9	59.2	59.2	59.4	59.6	59.7	59.7	60.0	60.0	60.0	60.0	60.0	60.0
GE	8000	57.3	58.2	61.4	61.8	63.1	63.1	63.3	63.4	63.6	63.6	63.9	63.9	63.9	63.9	63.9	63.9
GE	7000	58.9	59.8	63.1	63.4	64.8	64.8	65.0	65.1	65.2	65.2	65.6	65.6	65.6	65.6	65.6	65.6
Œ	6000	59.4	60.3	63.8	64.1	65.7	65.7	65.9	66.0	66.1	66.1	66.4	66.4	66.4	66.4	66.4	66.4
										_						_	
GE	5000	62.3	63.2	66.9	67.2	68.8	68.8	69.0	69.1	69.2	69.2	69.6	69.6	69.6	69.6	69.6	69.6
GE	4500	66.4	67.3	71.1	71.6	73.3	73.3	73.6	73.8	73.9	73.9	74.2	74.2	74.2	74.2	74.2	74.2
GE	4000	72.1	73.1	77.6	78.1	79.9	80.1	80.3	80.6	80.7	80.7	81.0	81.0	81.0	81.0	81.0	81.0
GE	3500	76.7	78.0	82.6	83.1	84.9	85.1	85.4	85.7	85.8	85.8	86.1	86.1	86.1	86.1	86.1	86.1
Œ	3000	79.0	80.4	85.7	86.4	88.4	88.7	89.0	89.2	89.3	89.3	89.7	89.7	89.7	89.7	89.7	89.7
Œ	2500	80.8	82.2	87.6	88.3	90.4	90.8	91.1	91.3	91.4	91.4	91.8	91.8	91.8	91.8	91.8	91.8
GE	2000	81.6	83.1	88.7	89.4	91.7	92.0	92.3	92.6	92.7	92.7	93.0	93.0	93.0	93.0	93.0	93.0
Œ	1800	82.2	83.8	89.3	90.2	92.4	92.8	93.1	93.3	93.4	93.4	93.8	93.8	93.8	93.8	93.8	93.8
GE	1500	83.1	84.7	91,0	92.0	94.3	94.8	95.1	95.3	95.4	95.4	95.8	95.8	95.8	95.8	95.8	95.8
Œ	1200	83.6	85.1	91.6	92.6	94.9	95.3	95.8	96.1	96.2	96.2	96.6	96.6	96.6	96.6	96.6	96.6
GE	1000	84.7	86.2	92.8	93.8	96.1	96.6	97.1	97.4	97.6	97.6	97.9	97.9	97.9	97.9	97.9	97.9
GE	900	85.0	86.6	93.1	94.1	96.4	96.9	97.4	97.8	97.9	97.9	98.2	98.2	98.2	98.2	98.2	98.2
GE	800	85.0	86.6	93.3	94.3	96.7	97.1	97.7	98.0	98.1	98.1	98.4	98.4	98.4	98.4	98.4	98.4
GE	700	85.1	86.7	93.4	94.6	96.9	97.3	97.9	98.2	98.3	98.3	98.7	98.7	98.7	98.7	98.7	98.7
GE	600	85.1	86.7	93.6	94.7	97.2	97.7	98.2	98.6	98.7	98.7	99.1	99.1	99.1	99.1	99.1	99.1
GE	500	85.3	87.0	93.9	95.1	97.7	98.1	98.7	99.0	99.1	99.1	99.6	99.6	99.6	99.6	99.6	99.6
Œ	400	85.3	87.0	93.9	95.1	97.9	98.3	98.9	99.2	99.3	99.3	99.8	99.8	99.8	99.8	99.8	99.8
GE	300	85.3	87.0	93.9	95.2	98.0	98.4	99.0	99.3	99.4	99.4	99.9	99.9	99.9	99.9	99.9	99.9
GE	200	85.3	87.0	93.9	95.2	98.0	98.4	99.0	99.3	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0
GE	100	85.3	87.0	93.9	95.2	98.0	98.4	99.0	99.3	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0
GE	000	85.3	87.0	93.9	95.2	98.0	98.4	99.0	99.3	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0
																200.0	

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 STATION NUMBER: 106070 LST TO UTC: - 1 MONTH: JUN HOURS: ALL CRILING VISIBILITY IN METERS IN Œ GE GR GE GE GE GE GE Œ GE Œ GE GE GR Œ GR FEET 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 30.2 30.9 33.7 34.1 35.3 35.5 35.7 36.0 36.1 36.1 36.1 36.2 36.2 36.2 36.2 36.3 42.5 GE 20000 35.5 36.3 39.6 40.2 41.8 42.0 42.8 42.9 43.0 43.0 43.1 43.1 43.1 43.2 43.3 **GE 18000** 35.6 36.4 39.7 40.3 41.8 42.1 42.5 42.9 43.0 43.0 43.1 43.1 43.1 43.2 43.2 43.4 36.4 42.5 43.0 43.0 GE 16000 35.6 39.7 40.3 42.1 42.9 43.1 43.1 43.1 43.2 43.2 43.4 41.8 GE 14000 35.8 36.6 39.9 40.5 42.1 42.3 42.8 43.1 43.2 43.3 43.3 43.3 43.3 43.4 43.4 43.6 37.0 **GE 12000** 36.2 40.4 41.0 42.6 42.9 43.3 43.7 43.8 43.8 43.9 43.9 43.9 44.0 44.0 44.2 GE 10000 39.1 40.0 43.8 47.1 47.5 47.6 47.8 47.9 47.9 47.9 48.0 48.0 44.5 46.3 46.6 48.2 GE 9000 40.2 41.1 45.1 45.9 47.7 48.1 48.6 48.9 49.1 49.2 49.3 49.3 49.3 49.5 49.5 49.7 GE 8000 43.5 44.5 48.9 49.7 51.7 52.0 52.5 52.9 53.0 53.2 53.3 53.3 53.3 53.4 53.4 53.6 7000 45.6 50.1 50.9 52.9 53.3 53.8 54.2 54.3 54.5 54.6 54.6 54.6 54.7 54.7 54.9 GE 44.6 GE 6000 46.0 53.3 53.7 54.3 54.8 55.0 55.1 55.1 55.1 55.2 45.0 50.5 51.4 54.7 55.2 55.4 GE 5000 47.6 48.7 53.5 56.4 56.8 57.3 57.8 57.9 58.1 58.2 58.2 58.2 58.3 58.3 58.5 54.4 4500 52.0 60.2 60.7 61.7 61.8 62.0 62.2 62.3 62.3 CR 50.8 57 0 58.0 61.3 62.1 62.2 62.5 4000 57.1 65.8 67.0 67.6 67.8 67.9 67.9 GE 55.8 62.5 63.5 66.3 67.4 68.0 68.1 68.1 68.3 70.8 72.0 72.5 72.9 73.0 GE 3500 60.2 61.6 67.4 68.4 71.3 72.7 73.0 73.1 73.2 73.2 73.4 GE 3000 65.5 66.9 73.5 74.8 77.5 78.1 78.8 79.4 79.6 79.8 80.0 80.0 80.0 80.1 80.1 80.4 GR 2500 67.6 69.1 75.9 77.3 80.0 80.6 81.3 82.0 82.1 82.4 82.5 82.5 82.5 82.7 82.7 82.9 GE 2000 70.1 71.7 78.8 80.2 83.1 83.7 84.5 85.2 85.3 85.6 85.7 85.8 85.8 85.9 85.9 86.1 85.9 86.1 1800 70.6 72.2 79.5 84.5 85.3 86.4 86.5 86.5 86.5 86.7 86.7 GE 80.9 83.8 86.9 GR 1500 72.4 73.9 82.1 83.6 86.6 87.3 88.1 88.8 89.0 89.3 89.4 89.4 89.5 89.6 89.6 89.8 GE 1200 73.9 75.5 83.9 85.5 88.6 89.3 90.2 90.9 91.2 91.4 91.5 91.6 91.6 91.7 91.7 92.0 GE 1000 75.1 76.7 85.5 87.1 90.3 91.0 92.0 92.7 93.0 93.2 93.3 93.4 93.4 93.5 93.5 93.8 GE 900 75.6 77.2 86.3 88.0 91.2 92.9 93.7 94.0 94.2 94.3 94.5 94.5 91.9 94.4 94.4 94.8 GR 800 75.9 77.5 86.9 88.6 91.9 92.6 93.6 94.5 94.7 95.0 95.1 95.1 95.2 95.3 95.3 95.5 GE 700 76.3 77.9 87.5 89.3 92.7 93.4 94.4 95.3 95.6 95.8 96.0 96.0 96.0 96.1 96.2 96.4 GE 600 76.5 78.1 88.0 89.8 93.3 94.1 95.2 96.1 96.3 96.7 96.8 96.9 96.9 97.0 97.1 97.3 GE 97.3 97.6 500 76.7 78.3 88.3 90.3 93.8 94.7 95.8 96.7 97.0 97.6 97.6 97.8 97.8 98.0 GE 400 76.8 78.4 88.5 90.4 94.1 95.1 96.2 97.3 97.7 98.1 98.3 98.4 98.4 98.6 98.6 98.8 GE 300 76.8 78.4 88.5 90.5 94.2 95.2 96.4 97.5 97.9 98.4 98.7 98.7 98.8 98.9 99.0 99.3 78.4 96.4 GE 200 76.8 88.5 95.2 97.6 98.0 98.5 98.8 99.2 99.3 99.7 90.5 94.2 98.9 99.0 GE 100 76.8 78.4 88.5 90.5 94.2 95.2 96.4 97.6 98.0 98.5 98.9 99.0 99.1 99.3 99.4 100.0 GE 000 76.8 78.4 88.5 90.5 94.2 95.2 96.4 97.6 98.0 98.5 98.9 99.0 99.1 99.3 99.4 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDARLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 MONTH: JUL HOURS: 00-02

				LST	TO UTC	: - 1					MONTH:	JUL	HOURS:	00-02			
CEILIN	NG	• • • • • •	• • • • • •	• • • • • •	• • • • • •		VISIBIL:	ITY IN I	METERS	• • • • • •		• • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • •	•••••
IN	1	GE	Œ	GE	GE	GE	GE	GE	GE	GE	GE	GE	Œ	GE	Œ	GE	Œ
FEET		112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
															• • • • • •		
NO CE	IL	50.5	51.4	54.6	55.2	55.7	55.7	56.1	56.2	56.2	56.3	56.3	56.3	56.3	56.3	56.3	56.4
GE 200		55.0	56.0	59.6	60.6	61.1	61.1	61.4	61.5	61.5	61.7	61.7	61.7	61.7	61.7	61.7	62.0
GE 180		55.0	56.0	59.6	60.6	61.1	61.1	61.4	61.5	61.5	61.7	61.7	61.7	61.7	61.7	61.7	62.0
GE 160	1	55.0	56.0	59.6	60.6	61.1	61.1	61.4	61.5	61.5	61.7	61.7	61.7	61.7	61.7	61.7	62.0
GE 140		55.0	56.0	59.6	60.6	61.1	61.1	61.4	61.5	61.5	61.7	61.7	61.7	61.7	61.7	61.7	62.0
GE 120		55.2	56.2	59.9	60.8	61.3	61.3	61.7	61.8	61.8	61.9	61.9	61.9	61.9	61.9	61.9	62.3
GE 100	000	56.7	57.6	61.4	62.4	62.9	62.9	63.2	63.3	63.3	63.5	63.5	63.5	63.5	63.5	63.5	63.8
GE 90	000	57.9	58.8	62.9	63.8	64.4	64.4	64.8	64.9	64.9	65.0	65.0	65.0	65.0	65.0	65.0	65.4
GE 80	000	62.1	63.3	67.5	68.5	69.2	69.2	69.5	69.6	69.6	69.8	69.8	69.8	69.8	69.8	69.8	70.1
GE 70	000	62.5	63.8	68.3	69.3	70.0	70.0	70.4	70.5	70.5	70.6	70.6	70.6	70.6	70.6	70.6	71.0
GE 60	000	62.9	64.2	68.8	69.8	70.5	70.5	71.0	71.1	71.1	71.2	71.2	71.2	71.2	71.2	71.2	71.5
		,															
	000	63.9	65.2	70.2	71.2	72.0	72.0	72.6	72.7	72.7	72.9	72.9	72.9	72.9	72.9	72.9	73.2
	500	66.5	67.9	73.3	74.3	75.1	75.1	75.8	76.0	76.0	76.1	76.1	76.1	76.1	76.1	76.1	76.4
	000	70.7	72.5	78.7	79.8	81.2	81.3	82.0	82.1	82.1	82.3	82.3	82.3	82.3	82.3	82.3	82.6
	500	73.7	75.7	82.4	83.5	84.9	85.0	85.7	85.8	85.8	86.0	86.0	86.0	86.0	86.0	86.0	86.3
GIB 30	000	75.0	77.1	84.3	85.5	87.1	87.3	88.0	88.2	88.2	88.3	88.3	88.3	88.3	88.3	88.3	88.7
OT 21	500	75.7	77.9	85.1	06.3	88.0	88.1		90.0	89.0	00.3	89.2	89.2	90.2	eo 2	89.2	00 5
	200	76.5	78.7	86.1	86.3 87.3	88.9	89.0	88.8 89.8	89.0 90.0	90.0	89.2 90.1	90.2	90.2	89.2 90.2	89.2 90.2	90.2	89.5 90.6
	300	77.1	79.3	86.7	87.9	89.5	89.6	90.4	90.6	90.6	90.7	90.8	90.8	90.8	90.8	90.8	91.2
	500	78.3	80.6	88.3	89.5	91.3	91.4	92.1	92.4	92.4	92.5	92.6	92.6	92.6	92.6	92.7	93.1
	200	78.7	81.0	88.7	90.1	91.9	92.0	92.7	93.0	93.0	93.1	93.2	93.2	93.2	93.2	93.3	93.7
90 11		, , , ,	01.0	00.7	30.1	31.3	32.0	J2 • 1	33.0	33.0	93.1	33.2	33.2	33.6	,,, <u>,</u>	33.3	33.1
GB 10	000	78.9	81.2	89.0	90.5	92.5	92.6	93.3	93.6	93.6	93.7	93.8	93.8	93.8	93.8	93.9	94.3
GE 9	900	79.8	82.0	90.4	91.8	93.8	93.9	94.6	94.9	94.9	95.0	95.1	95.1	95.1	95.1	95.2	95.6
GE 6	800	80.1	82.4	91.1	92.5	94.5	94.6	95.4	95.6	95.6	95.7	95.8	95.8	95.8	95.8	96.0	96.3
GE 7	700	80.2	82.5	91.3	92.7	94.9	95.0	95.7	96.1	96.1	96.2	96.3	96.3	96.3	96.3	96.4	96.8
GE 6	500	80.6	82.9	92.1	93.6	95.7	95.8	96.7	97.0	97.0	97.1	97.3	97.3	97.3	97.3	97.4	97.7
GB 5	500	81.0	83.3	92.7	94.2	96.3	96.4	97.3	97.6	97.6	97.7	97.9	97.9	97.9	97.9	98.0	98.3
GE 4	600	81.0	83.3	92.7	94.5	96.8	96.9	97.9	98.2	98.2	98.3	98.5	98.5	98.5	98.5	98.6	98.9
GE 3	300	81.0	83.3	93.0	94.8	97.3	97.5	98.5	98.8	98.8	98.9	99.0	99.0	99.0	99.0	99.2	99.5
	200	81.0	83.3	93.1	94.9	97.4	97.6	98.6	98.9	98.9	99.3	99.4	99.4	99.4	99.4	99.5	99.9
GB 1	100	81.0	83.3	93.1	94.9	97.4	97.6	98.6	98.9	98.9	99.3	99.4	99.4	99.4	99.4	99.5	99.9
	[
GE (000	81.0	83.3	93.1	94.9	97.4	97.6	98.6	98.9	98.9	99.3	99.4	99.4	99.4	99.5	99.6	100.0
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PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: JUL HOURS: 03-05 CRILING VISIBILITY IN METERS GR GE Œ GE Œ GR GR GE GR GE GE GR GR GR GE IN GR 112 90 12 PRRT 80 60 48 40 32 24 20 16 10 08 06 04 00 NO CEIL 34.5 35.5 41.4 42.9 45.0 45.6 46.2 46.8 46.9 47.4 47.7 47.9 47.9 47.9 47.9 47.9 GR 20000 38.0 38.9 45.1 46.9 49.6 50.4 51.0 51.5 51.7 52.1 52.5 52.6 52.6 52 52.6 53.0 38.1 39.0 47.0 50.5 51.1 51.7 51.8 52.3 52.6 52.7 52.7 52.7 GE 18000 45.2 49.8 52.7 53.1 GR 16000 39.0 47.0 50.5 51.8 52.6 52.7 52.7 52.7 38.1 45.2 49.8 51.1 51.7 52.3 52.7 53.1 GE 14000 38.3 39.3 45.5 47.3 50.0 50.7 51.3 51.9 52.0 52.5 52.9 53.0 53.0 53.0 53.0 53.3 GE 12000 38.7 39.6 45.8 47.6 50.4 51.1 51.7 52.3 52.4 52.9 53.2 53.3 53.3 53.3 53.3 55.0 GE 10000 40.0 41.0 49.4 52.1 52.9 53.5 54.0 54.2 54.6 55.1 55.1 55.1 GE 9000 41.4 49.2 51.1 55.5 56.1 56.3 56.8 57.1 57.3 57.3 57.3 42.4 53.9 54.9 57.3 57.6 GE 8000 45.1 46.2 53.3 55.2 58.3 59.3 60.0 60.6 61.0 61.4 61.8 61.9 61.9 61.9 61.9 62.3 GE 7000 45.6 46.7 54.0 56.0 59.0 60.0 60.7 61.3 61.7 62.1 62.5 62.6 62.6 62.6 62.6 63.0 47.3 GR 6000 46.2 56.5 61.3 62.3 62.7 63.1 63.2 63.2 54.6 59.6 60.6 61.9 63.2 63.2 63.6 63.6 65.5 GE 5000 49.2 58.8 62.9 64.2 64.5 65.0 €5.4 65.5 65.5 48.1 56.9 61.9 65.6 66.0 4500 61.7 66.5 67.1 67.5 68.0 68.3 68.5 68.5 68.5 68.0 CR 50.1 51.3 59.5 64.9 65.8 68.6 4000 67.1 72.6 73.2 73.6 74.0 74.4 74.6 74.6 74.8 74.9 75.2 GE 54.3 55.7 64.9 70.8 71.8 78.1 GR 3500 75.7 76.8 77.3 77.6 77.9 56.0 57.4 67.4 69.8 74.9 76.4 77.9 78.0 78.5 73.6 GE 3000 58.0 59.5 70.4 72.7 76.7 78.0 78.8 79.5 79.9 80.4 80.7 81.0 81.0 81.1 81.2 81.5 GE 2500 58.6 60.1 71.0 73.3 77.3 78.6 79.4 80.1 80.5 81.0 81.3 81.5 81.5 81.7 81.8 82.1 GE 2000 59.8 61.4 72.4 74.8 78.7 80.0 80.8 81.8 82.1 82.6 83.1 83.3 83.6 83.7 83.8 84.2 1800 75.6 79.9 82.0 83.3 83.8 84.3 84.9 85.0 85.4 GR 60.4 62.0 73.2 81.2 83.0 84.5 84.8 GE 1500 62.4 64.0 76.3 78.8 83.6 85.0 85.8 86.8 87.1 87.6 88.1 88.3 88.6 88.7 88.8 89.2 89.8 GE 1200 63.1 77.3 79.8 86.2 87.1 88.2 88.6 89.0 89.5 90.0 64.8 84.8 90.1 90.2 90.6 GE 1000 64.6 66.3 79.5 82.1 87.1 88.6 89.6 90.7 91.1 91.5 92.0 92.3 92.5 92.6 92.9 93.2 GE 900 66.5 80.0 82.6 87.6 89.0 90.1 91.2 91.5 92.0 92.5 92.7 93.0 93.1 64.9 93.3 93.7 GR 800 64.9 66.5 80.0 82.6 87.6 89.0 90.1 91.2 91.5 92.0 92.5 92.7 93.0 93.1 93.3 93.7 GE 700 65.1 66.8 80.2 82.9 87.9 89.3 90.4 91.4 91.8 92.3 92.7 93.0 93.2 93.3 93.6 93.9 GE 600 l 65.6 67.3 81.3 83.9 89.0 90.5 91.5 92.6 93.0 93.5 93.9 94.2 94.4 94.5 94.8 95.1 GE 67.5 94.3 95.4 95.5 500 65.8 81.9 84.5 90.0 91.5 92.6 93.8 94.8 95.8 96.0 96.2 96.5 GR 400 66.C 67.6 82.3 85.1 90.7 92.3 93.3 94.8 95.2 95.8 96.4 96.7 96.9 97.0 97.3 97.6 GE 300 66.0 67.6 82.3 85.1 90.8 92.6 93.9 95.4 96.0 96.5 97.5 97.7 98.0 98.1 98.5 98.8 66.0 ar 2001 67.6 82.4 85.2 91.0 93.0 94.3 95.8 96.4 97.0 98.0 98.3 98.6 98.7 99.0 99.4 GE 100 66.0 67.6 82.4 85.2 91.0 93.0 94.3 95.8 96.4 97.1 98.1 98.5 98.7 98.8 99.4 99.9 QR. 000 66.0 67.6 82.4 85.2 91.0 93.0 94.3 95.8 96.4 97.1 98.1 98.5 98.7 98.8 99.4 100.0

TOTAL NUMBER OF OBSERVATIONS 840

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: JAN 80 - DEC 89 STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY LST TO UTC: - 1 MONTH: JUL HOURS: 06-08 CEILING VISIBILITY IN METERS IN GE GR GR GE GE GR GE GE GE GE GE Œ GE Œ 16 80 12 00 FEET 112 90 60 48 40 32 24 20 10 08 06 04 NO CEIL 26.6 26.8 32.5 34.0 36.7 37.5 38.1 38.8 39.3 39.4 39.5 39.5 39.6 39.7 40.0 40.1 37.2 GR 20000 30.4 30.9 38.9 42.4 43.4 43.9 44.6. 45.2 45.5 45.7 45.7 45.9 46.0 46.3 46.6 30.9 37.2 38.9 42.4 43.4 43.9 44.6 45.2 45.5 45.7 45.7 45.9 46.0 46.6 GE 18000 30.4 46.3 GR 16000 30.9 37.2 38.9 43.9 44.6 45.2 45.5 45.7 45.7 45.9 46.0 46.3 46.6 30.4 42.4 43.4 GE 14000 30.8 31.2 37.5 39.3 42.8 43.7 44.3 45.0 45.6 45.8 46.0 46.0 46.3 46.4 46.6 47.0 GE 12000 31.1 31.6 38.0 39.7 43.2 44.4 45.0 45.7 46.3 46.5 46.7 46.7 47.0 47.1 47.3 47.7 47.3 47.9 48.6 49.2 49.4 49.7 GE 10000 33.1 33.6 40.4 42.3 46.2 49.7 49.9 50.0 50.2 49.4 50.1 50.7 GE 9000 41.4 43.4 47.4 48.7 51.0 51.3 51.3 51.5 51.6 51.9 33.7 34.1 52.3 Œ 8000 35.5 36.0 43.7 45.7 49.8 51.0 51.7 52.4 53.0 53.4 53.7 53.7 54.0 54.1 54.3 54.8 Œ 7000 36.0 36.5 44.4 46.4 50.5 51.7 52.4 53.1 53.7 54.1 54.4 54.4 54.7 54.8 55.0 55.5 36.6 52.1 52.8 54.5 55.5 **GR** 6000 36.1 44.8 46.7 50.8 53.5 54.2 54.9 54.9 55.1 55.2 55.9 47.2 55.9 57.7 Œ 5000 38.1 38.7 49.5 53.7 56.6 57.3 58.0 58.0 58.3 58.7 55.1 58.5 59.3 4500 41.0 60.3 61.9 Œ 40.3 50.3 53.0 57.2 58.6 59.4 61.1 61.5 61.9 62.1 62.4 62.6 63.2 Œ 4000 43.5 44.3 54.1 63.3 64.1 64.9 65.7 66.3 66.8 67.0 67.5 56.8 61.7 66.8 67.2 68.2 66.4 GE 3500 44.8 45.6 55.9 58.6 63.9 67.2 68.1 69.1 65.6 68.6 69.1 69.3 69.6 69.8 70.5 GR 3000 47.3 48.1 59.3 62.1 67.7 69.9 70.9 71.8 72.6 73.4 73.9 73.9 74.1 74.4 74.7 75.4 GR 2500 47.9 48.7 60.0 62.8 68.6 70.9 71.8 73.0 73.8 74.6 75.1 75.1 75.3 75.5 75.9 76.6 Œ 2000 50.7 62.5 76.5 77.3 77.7 49.9 65.3 71.2 73.4 74.4 75.6 77.7 78.0 78.2 78.6 79.3 GE 1800 62.7 78.3 50.1 50.9 65.5 74.7 76.0 76.8 77.6 78.1 78.1 78.6 78.9 79.6 71.4 73.7 GR 1500 52.8 53.8 66.3 69.3 75.6 78.1 79.5 80.8 81.7 82.5 83.0 83.0 83.2 83.4 83.8 84.5 GE 1200 54.1 55.1 67.8 71.0 77.6 80.2 81.9 83.2 84.1 85.0 85.5 85.5 85.8 86.0 86.4 87.1 Œ 1000 55.8 56.9 69.9 73.4 80.3 83.0 84.7 86.0 87.1 87.9 88.5 88.5 88.7 88.9 89.4 90.1 GR 900 57.1 70.4 89.0 89.3 56.1. 73.9 80.8 83.4 85.2 86.5 87.6 88.5 89.0 89.5 90.0 90.7 Œ 800 56.3 57.3 71.3 74.9 81.9 84.6 86.5 87.8 88.9 89.7 90.3 90.3 90.6 90.8 91.3 92.0 Œ 700 57.0 58.0 72.3 75.9 83.0 85.7 87.5 88.8 90.0 90.8 91.4 91.4 91.6 91.8 92.3 93.0 77.9 92.3 Œ 600 57.7 74.2 93.8 94.3 58.7 85.2 87.9 89.9 91.1 93.2 93.8 94.1 94.8 95.5 GR 75.2 95.5 500 57.8 58.9 79.0 86.5 89.3 91.4 92.8 93.9 95.7 95.9 96.4 94.9 95.5 97.1 CR 400 57.9 59.0 75.5 79.4 86.9 90.0 92.2 94.4 95.7 96.6 97.2 97.2 97.4 97.7 98.1 98.8 Œ 300 57.9 59.0 75.5 79.4 87.1 90.1 92.3 94.8 96.0 97.0 97.7 97.7 97.9 98.1 98.6 99.7 79.4 Œ 200 57.9 59.0 75.5 98.1 98.8 99.9 87.1 90.3 92.5 95.0 96.3 97.2 97.9 97.9 98.4 Œ 100 57.9 59.0 75.5 79.4 87.1 90.3 92.5 95.0 96.3 97.2 97.9 97.9 98.1 98.4 98.8 100.0 Œ 000 57.9 59.0 75.5 79.4 87.1 90.3 92.5 95.0 96.3 97.2 97.9 97.9 98.1 98.4 98.8 100.0

TOTAL NUMBER OF OBSERVATIONS 858

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 STATION NUMBER: 106070 LST TO UTC: - 1 MONTH: JUL HOURS: 09-11 CRILING VISIBILITY IN METERS IN Œ GE Œ GE Œ GE GR GE Œ GE GE GE GE GR Œ GR 112 32 24 20 06 00 FEET 90 80 60 48 40 16 12 10 08 04 37.9 37.9 37.9 37.9 37.9 37.9 NO CEIL 31.9 32.8 36.0 36.8 38.0 38.0 38.0 38.0 38.0 GE 20000 37.5 38.5 44.8 44.8 44.8 44.8 44.9 44.9 42.4 43.6 44.8 44.8 44.8 44.9 44.9 44.9 GE 18000 37.6 38.6 42.5 43.7 44.9 44.9 44.9 44.9 44.9 44.9 44.9 45.0 45.0 45.0 45.0 45.0 GE 16000 37.6 38.6 42.5 43.7 44.9 44.9 44.9 44.9 44.9 44.9 44.9 45.0 45.0 45.0 45.0 45.0 43.1 44.3 43.6 44.8 GE 14000 39.2 45.5 45.5 45.5 38.2 45.5 45.5 45.5 45.5 45.6 45.6 45.6 45.6 45.6 GE 12000 38.7 39.6 45.9 45.9 45.9 45.9 45.9 45.9 45.9 46.0 45.0 46.0 46.0 46.0 GE 10000 42.1 43.0 47.1 48.3 49.4 49.4 49.4 49.4 49.5 49.5 49.5 49.7 49.7 49.7 49.7 49.7 GE 9000 43.6 44.6 48.8 50.1 51.3 51.3 51.3 51.3 51.4 51.4 51.4 51.5 51.5 51.5 51.5 51.5 GE 8000 47.1 48.4 53.0 54.4 55.7 55.8 55.9 56.1 56.2 56.2 56.2 56.4 56.4 56.4 56.4 56.4 GE 7000 47.6 48.8 53.5 54.9 56.2 56.3 56.4 56.5 56.6 56.6 56.6 56.9 56.9 56.9 56.9 56.9 GR 6000 48.1 49.4 54.2 55.6 56.9 57.0 57.1 57.2 57.3 57.3 57.3 57.6 57.6 57.6 57.6 57.6 GE 5000 49.7 50.9 55.9 57.3 58.6 58.7 58.9 59.0 59.1 59.1 59.1 59.3 59.3 59.3 59.3 59.3 GR 4500 50.7 52.1 57.3 59.0 60.3 60.4 60.5 60.6 60.7 60.7 60.7 61.0 61.0 61.0 61.0 61.0 GE 4000 54.2 55.7 61.7 63.4 64.8 64.9 65.0 65.2 65.3 65.3 65.3 65.5 65.5 65.5 65.5 65.5 GE 3500 58.3 60.0 66.1 67.8 69.3 69.6 69.9 70.0 70.2 70.2 70.2 70.4 70.4 70.4 70.4 70.4 63.9 71.1 75.4 GE 3000 62.1 73.0 74.7 74.9 75.8 75.9 76.0 76.0 76.3 76.3 76.3 76.3 76.3 GE 2500 65.3 73.0 76.6 76.8 77.4 77.7 77.9 78.0 78.0 78.3 78.3 78.3 78.3 63.4 74.8 78.3 GR 2000 66.2 68.4 76.7 78.7 80.4 80.8 81.6 81.9 82.1 82.2 82.2 82.5 82.5 82.5 82.5 82.5 77.7 83.1 83.6 GE 1800 67.2 69.5 79.7 81.5 61.8 82.6 83.0 83.2 83.2 83.6 83.6 83.6 83.6 GE 1500 70.7 73.2 81.9 83.9 85.9 86.2 87.1 87.4 87.5 87.6 87.6 88.0 88.0 88.0 88.0 88.0 GR 1200 73.3 75.8 84.8 86.8 88.9 89.3 90.1 90.4 90.6 90.7 90.7 91.0 91.0 91.0 91.0 91.0 GE 1000 75.1 77.5 86.9 89.0 91.5 91.8 92.8 93.1 93.2 93.4 93.4 93.7 93.7 93.7 93.7 93.7 GE 900 75.8 78.2 87.9 90.2 92.9 93.2 94.2 94.5 94.6 94.8 94.8 95.1 95.1 95.1 95.1 95.1 95.7 95.8 96.3 96.3 GR 800 76.3 78.8 88.7 91.1 93.9 94.3 95.3 95.9 95.9 96.3 96.3 96.3 Œ 700 76.7 79.3 89.3 91.8 94.9 95.3 96.4 96.7 96.9 97.0 97.0 97.3 97.3 97.3 97.3 97.3 GE 98.6 98.7 98.8 98.8 99.2 99.2 99.2 600 77.4 80.0 90.9 93.5 96.6 97.2 98.3 99.2 99.2 GE 500 77.5 80.1 91.3 93.8 97.1 97.7 98.7 99.1 99.2 99.3 99.3 99.7 99.7 99.7 99.7 99.7 80.1 91.3 99.3 99.4 99.5 99.9 99.9 GE 400 77.5 93.8 97.2 97.9 99.0 99.5 99.9 99.9 99.9 GE 300 77.5 80.1 91.3 93.8 97.2 97.9 99.0 99.3 99.4 99.5 99.7 100.0 100.0 100.0 100.0 100.0 GE 200 77.5 80.1 91.3 93.8 97.2 97.9 99.0 99.3 99.4 99.5 99.7 100.0 100.0 100.0 100.0 100.0 CR 100 77.5 80.1 91.3 93.8 97.2 97.9 99.0 99.3 99.4 99.5 99.7 100.0 100.0 100.0 100.0 100.0 GE 000 77.5 80.1 91.3 93.8 97.2 97.9 99.0 99.3 99.4 99.5 99.7 100.0 100.0 100.0 100.0 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: JUL HOURS: 12-14

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	LING '							ITY IN									_
	N	GE	GE	GE	GE	GE	Œ	GE	GE	GE	GE	GE	GE	GE	GE	GE	Œ
FE	et	112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
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	i																
MO	CEIL	31.7	32.8	33.8	33.8	33.9	33.9	33.9	33.9	33. 9	33.9	33.9	33.9	33. 9	33.9	33.9	33.9
	20000	37.5	38.7	40.1	40.2	40.3	40.3	40.3	40.3	40.3	40.3	40.3	40.3	40.3	40.3	40.3	40.3
	18000	37.6	38.8	40.2	40.3	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4
	16000	37.6	38.8	40.2	40.3	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4	40.4
	14000	38.2	39.4	40.8	40.9	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0
Œ	12000	38.5	39.6	41.0	41.1	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
Œ	10000	41.6	42.8	44.2	44.3	44.5	44.5	44.5	44.5.	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
GR	9000	42.8	43.9	45.3	45.6	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8
Œ	8000	47.2	48.4	50.0	50.2	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5
GR	7000	47.3	48.5	50.1	50.3	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6
GE	6000	47.9	49.1	50.8	51.0	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3
Œ	5000	51.3	52.6	54.5	54.8	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
Œ	4500	54.4	55.8	57.9	58.2	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5
GR	4000	59.8	61.3	63.5	63.8	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1
GE	3500	68.8	70.9	73.7	73.9	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
GE	3000	76.3	78.6	81.7	81.9	82.4	82.4	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5
						••••			•=••								
GIR.	2500	79.8	82.2	85.4	85.7	86.1	86.1	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2
GIR	2000	83.0	85.4	89.5	89.7	90.2	90.2	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
GE	1800	84.4	86.9	91.1	91.4	91.8	91.8	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
GE	1500	86.6	89.2	93.9	94.2	94.6	94.6	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
GE	1200	88.0	90.6	95.6	95.8	96.3	96.3	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4
						2010	2013	30	,,,,		2011	2011			2014	2011	3000
Œ	1000	88.7	91.4	96.4	96.6	97.1	97.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
GE	900	89.0	91.7	97.1	97.3	97.8	97.8	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9
GE	800	89.0	91.7	97.7	97.9	98.4	98.4	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
GE	700	89.2	91.8	97.9	98.1	99.0	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
GR	600	89.6	92.3	98.5	98.7	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
	000	03.0	72.5	30.3	30.,	,,,,,	33.0	33.3	33.3	33.3	,,,,	23.3	23.3	33.3	,,,,	22.3	33.3
Œ	500	89.6	92.3	98.5	98.7	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
GE	400	89.6	92.3	98.5	98.7	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE	300	89.6	92.3	98.5	98.7	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Œ	200	89.6	92.3	98.5	98.7	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE	100	89.6	92.3														
ΨE	100	09.0	94.3	98.5	98.7	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
æ	000	90 E	02.2	00 5	00.7	00 6	00.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GIS.	000	89.6	92.3	98.5	98.7	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
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PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: JUL HOURS: 15-17 VISIBILITY IN METERS CEILING GR GR GE GE Œ GR GR GR Œ GR Œ GE Œ GE Œ GR IN FEET 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 35.4 35.4 GE 20000 40.7 42.3 43.1 43.1 43.2 43.2 43.2 43.2 43.2 43.2 43.2 43.2 43.2 43.2 43.2 43.2 GE 18000 40.7 42.3 43.2 43.2 43.2 43.2 43.2 43.2 43.2 43.2 43.2 43.1 43.1 43.2 43.2 43.2 GR 16000 40.7 42.3 43.1 43.1 43.2 43.2 43.2 43.2 43.2 43.2 43.2 43.2 43.2 43.2 43.2 43.2 GR 14000 40.9 43.5 42.5 43.4 43.4 43.5 43.5 43.5 43.5 43.5 43.5 43.5 43.5 43.5 43.5 43.5 44.2 44.2 44.2 44.2 GR 12000 41.5 43.2 44.1 44.1 44.2 44.2 44.2 44.2 44.2 44.2 44.2 44.2 GR 10000 45.8 47.6 48.6 48.6 48.7 48.7 48.7 48.7 48.7 48.7 48.7 48.7 48.7 48.7 48.7 48.7 GE 9000 47.0 48.7 49.9 49.9 50.0 50.0 50.0 50.0 50.0 50.0 50.0 50.0 50.0 50.0 50.0 50.0 GE 8000 51.3 53.0 54.3 54.3 54.4 54.4 54.4 54.4 54.4 54.4 54.4 54.4 54.4 54.4 54.4 54.4 GE 7000 55.6 55.6 55.6 54.0 55.5 55.5 55.6 55.6 55.6 55.6 55.6 55.6 55.6 55.6 52.1 55.6 GE 6000 53.1 55.0 56.6 56.6 56.8 56.8 56.8 56.8 56.8 56.8 56.8 56.8 56.8 56.8 56.8 56.8 GR 5000 58.3 60.1 61.8 61.8 61.9 61.9 61.9 61.9 61.9 61.9 61.9 61.9 61.9 61.9 61.9 61.9 GE 4500 61.9 63.8 65.4 65.4 65.5 65.5 65.5 65.5 65.5 65.5 65.5 65.5 65.5 65.5 65.5 65.5 75.2 83.3 GE 4000 75.1 75.1 75.2 75.2 75.2 75.2 75.2 75.2 71.4 73.3 75.2 75.2 75.2 75.2 75.2 83.3 83.3 83.2 GR 3500 79.1 81.5 83.2 83.3 83.3 83.3 83.3 83.3 83.3 83.3 83.3 83.3 GE 3000 83.4 86.2 88.6 88.6 88.9 88.9 88.9 88.9 88.9 88.9 88.9 88.9 88.9 88.9 88.9 88.9 GE 2500 85.7 88.6 91.0 91.0 91.6 91.6 91.6 91.6 91.6 91.6 91.6 91.6 91.6 91.6 91.6 91.6 GE 2000 87.2 90.1 92.8 92.8 93.4 93.4 93.4 93.4 93.4 93.4 93.4 93.4 93.4 93.4 93.4 93.4 1800 **GR** 88.3 91.3 94.1 94.1 94.6 94.6 94.6 94.6 94.6 94.6 94.6 94.6 94.6 94.6 94.6 94.6 GE 1500 89.7 92.9 95.7 95.9 96.6 96.5 96.6 96.6 96.6 96.6 96.6 96.6 96.6 96.6 96.6 96.6 96.4 96.6 97.4 1200 90.2 97.4 97.4 97.4 97.4 97.4 97.4 GE 93.4 97.4 97.4 97.4 97.4 97.4 GR 1000 90.6 93.7 96.7 97.1 98.1 98.1 98.1 98.1 98.1 98.1 98.1 98.1 98.1 98.1 98.1 98.1 98.4 97.2 GR 900 90.6 93.7 96.7 98.4 98.4 98.4 98.4 98.4 98.4 98.4 98.4 98.4 98.4 98.4 97.4 GE 800 90.7 93.8 97.0 98.6 98.6 98.6 98.6 98.6 98.6 98.6 98.6 98.6 98.6 98.6 98.6 97.3 97.8 97.6 98.0 99.3 99.3 99.5 99.5 99.3 99.5 99.3 99.3 GR 700 90.7 93.8 99.3 99.3 99.3 99.3 99.3 99.3 99.3 99.3 GE 600 90.7 93.8 97.6 99.5 99.5 99.5 99.5 99.5 99.5 99.5 99.5 99.5 GR 500 90.7 93.8 97.8 98.3 99.8 99.8 99.8 99.8 99.8 99.8 99.8 99.8 99.8 99.8 99.8 GE 400 90.7 93.8 97.8 98.3 99.8 99.8 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 97.8 GE 300 90.7 93.8 98.3 99.8 99.8 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 GR 200 90.7 93.8 97.8 98.3 99.8 99.8 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 GE 100 90.7 93.8 97.8 98.3 99.8 99.8 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 GE 000 90.7 93.8 97.8 98.3 99.8 99.8 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0

TOTAL NUMBER OF OBSERVATIONS 858

OPERATING LOCATION "A" PERCENTAGE PREQUENCY OF OCCURRENCE OF CBILING VERSUS VISIBILITY USAFETAC, ASHEVILLE NC PROM HOUBILY ORDERSTRANGED

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: JUL HOURS: 18-20

				LST	TO UTC	2 - 1					MONTH:	JUL	HOURS:	18-20			
		• • • • • •	• • • • • • •	• • • • • •	• • • • • • •					• • • • • • •	• • • • • • •	•••••	• • • • • •	•••••	• • • • • • •	• • • • • • •	•••••
CEI	Ling 	GE	_				VISIBIL		GE	-	GE	an	GE.	45			an
PE		112	GE 90	GE 80	GZE 60	GE 48	GE 40	GE 32	24	GE 20	16	GE 12	10	GE 08	GE 06	GE 04	GE OO
	P	112				•••	40		24	20	10	12					
	1								•••••		•						
NO	CEIL	43.9	44.6	46.0	46.0	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1
Œ	20000	49.2	50.1	51.9	51.9	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1
GE	18000	49.5	50.5	52.2	52.2	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5
Œ	16000	49.5	50.5	52.2	52.2	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5
Œ	14000	49.9	50.8	52.6	52.6	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8
GE	12000	50.6	51.5	53.6	53.6	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9
	10000	55.3	56.3	58.8	58.8	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0
GE	9000	56.0	57.0	59.8	60.0	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4
GE	8000	61.3	62.6	65.5	65.8	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1
Œ	7000	61.9	63.2	66.4	66.6	66.9	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
Œ	6000	63.2	64.5	67.6	67.9	68.2	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3
Œ	5000	66.9	68.5	71.8	72.1	72.4	72.5	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
GE	4500	69.3	70.8	74.3	74.5	74.9	75.0	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1
GE	4000	76.1	77.8	82.0	82.2	82.7	82.8	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9
GE	3500	79.8	81.8	86.3	86.7	87.1	87.3	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4
GE	3000	83.3	85.5	90.5	91.4	91.8	91.9	92.1	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2
Œ	2500	84.1	86.3	91.5	92.3	93.0	93.1	93.2	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
GE	2000	85.4	87.6	93.0	93.9	94.7	94.9	95.0	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1
Œ	1800	86.0	88.2	93.7	94.6	95.4	95.6	95.7	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8
GE	1500	87.3	89.6	95.1	96.0	96.8	97.0	97.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
Œ	1200	87.5	89.8	95.3	96.3	97.2	97.3	97.4	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5
Œ	1000	87.7	90.2	96.1	97.1	98.0	98.1	98.2	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
GE	900	88.1	90.5	96.8	97.9	98.8	98.9	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
Œ	800	88.1	90.5	97.1	98.1	99.1	99.2	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
Œ	700	88.3	90.8	97.3	98.4	99.3	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
GE	600	88.3	90.8	97.3	98.4	99.3	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
	F00	00.3		07.4													
GE GE	500 400	88.3 88.3	90.8	97.4	98.5	99.4	99.5	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
GE	300	88.4	90.8 90.9	97.4 97.5	98.5 98.6	99.4 99.5	99.6 99.8	99.8 99.9	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0
GE	200	68.4	90.9	97.5	98.6	99.5	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE	100	88.4	90.9	97.5	98.6	99.5	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
46	100	55.4	30.3	37.13	30.0	23.3	23.0	22.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Œ	000	88.4	90.9	97.5	98.6	99.5	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
•••	• • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • • • •	• • • • • •		• • • • • •	• • • • • •		• • • • • •	· • • • • • • •	• • • • • •		

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: JUL HOURS: 21-23 CRILING VISIBILITY IN METERS IN GR GR GR Œ GE GR GE GR GE GR GE Œ GR Œ GE 90 48 FRET 112 80 60 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 49.4 51.2 52.5 52.8 53.2 53.2 53.2 53.2 53.2 53.4 53.4 53.4 53.4 53.4 53.4 55.8 GE 20000 53.6 58.0 58.4 59.0 59.0 59.0 59.0 59.0 59.0 59.1 59.1 59.1 59.1 59.1 59.4 GE 18000 53.6 55.8 58.0 58.4 59.0 59.0 59.0 59.0 59.0 59.0 59.1 59.1 59.1 59.1 59.1 59.4 GE 16000 53.6 55.8 58.0 58.4 59.0 59.0 59.0 59.0 59.0 59.0 59.1 59.1 59.1 59.1 59.1 59.4 **GE 14000** 53.6 55.9 58.3 58.8 59.4 59.4 59.4 59.4 59.4 59.4 59.5 59.5 59.5 59.5 59.5 59.7 **GR 12000** 54.1 56.4 58.9 59.4 60.1 60.1 60.1 60.1 60.1 60.1 60.2 60.2 60.2 60.2 60.2 60.4 GE 10000 57.1 59.6 62.1 62.5 63.4 63.4 63.6 63.6 63.6 63.6 63.7 63.7 63.7 GE 9000 58.0 60.4 62.9 63.5 64.4 64.5 64.8 64.9 65.0 65.0 65.0 64.9 64.9 65.0 65.0 65.3 GE 8000 63.5 66.2 68.8 69.4 70.3 70.4 70.7 70.8 70.8 70.8 70.9 70.9 70.9 70.9 70.9 71.1 **GE 7000** 64.1 66.8 69.6 70.3 71.3 71.5 71.7 71.8 71.8 71.8 72.0 72.0 72.0 72.0 72.0 72.2 67.3 70.1 GR 6000 64.5 72.2 70.8 71.7 72.0 72.3 72.3 72.3 72.4 72.4 72.4 72.4 72.4 72.7 GR 5000 67.4 72.9 75.4 70.1 73.6 74.6 74.8 75.3 75.4 75.4 75.5 75.5 75.5 75.5 75.5 75.7 GR 4500 70.9 73.6 76.6 77.5 78.4 78.7 79.2 79.3 79.3 79.3 79.4 79.4 79.4 79.4 79.4 79.6 GE 4000 75.0 77.9 61.7 82.9 84.0 84.2 84.9 85.0 85.0 85.0 85.2 85.2 85.2 85.2 85.2 85.4 GR 3500 78.7 81.6 85.6 86.9 88.0 88.2 88.9 89.0 89.0 89.0 89.2 89.2 89.2 89.2 89.2 89.4 GR 3000 80.7 83.6 87.8 89.0 90.2 90.5 91.2 91.3 91.3 91.3 91.4 91.4 91.4 91.4 91.4 91.6 GE 2500 81.5 84.5 88.7 90.0 91.3 91.5 92.2 92.3 92.3 92.3 92.5 92.5 92.5 92.5 92.5 92.7 GE 2000 82.9 85.9 90.2 91.5 92.8 93.1 93.9 94.0 94.0 94.0 94.1 94.1 94.1 94.1 94.1 94.3 GE 1800 90.7 83.3 86.2 92.0 93.3 93.5 94.3 94.5 94.5 94.5 94.6 94.6 94.6 94.6 94.6 94.8 GE 1500 84.1 87.0 91.5 92.8 94.1 94.3 95.2 95.3 95.3 95.3 95.4 95.4 95.4 95.4 95.4 95.6 **GE 1200** 84.2 87.2 91.9 93.2 94.5 94.7 95.5 95.6 95.6 95.6 95.8 95.8 95.8 95.8 95.8 96.0 GR 1000 84.3 87.3 92.1 93.4 94.8 95.1 95.9 96.0 96.0 96.0 96.1 96.1 96.1 96.1 96.1 96.3 96.0 GE 900 84.8 87.8 92.8 95.8 96.8 97.1 94.2 96.9 96.9 96.9 97.1 97.1 97.1 97.1 97.3 GE 800 85.2 88.1 93.2 94.7 96.2 96.5 97.3 97.4 97.4 97.4 97.5 97.5 97.5 97.5 97.5 97.8 98.2 GE 700 85.2 88.1 93.6 95.3 96.8 97.2 98.0 98.2 98.2 98.1 98.1 98.1 98.2 98.2 98.5 85.2 GE 600 88.1 94.0 95.6 97.3 97.6 98.5 98.6 98.6 98.6 98.7 98.7 98.7 98.7 98.7 98.9 88.3 GR 500 85.2 94.2 95.9 97.8 98.1 98.9 99.1 99.1 99.1 99.2 99.2 99.2 99.2 99.2 99.4 GE 400 85.2 88.3 94.3 96.1 98.0 98.4 99.2 99.3 99.3 99.3 99.4 99.4 99.4 99.4 99.4 99.6 85.2 88.3 GE 300 94.3 98.1 98.5 99.3 99.4 99.6 96.2 99.4 99.4 99.6 99.6 99.6 99.6 99.9 GE 200 85.2 88.3 94.3 96.2 98.1 98.5 99.3 99.4 99.4 99.4 99.6 99.6 99.6 99.6 99.6 99.9 GR 100 85.2 88.3 94.3 96.2 98.1 98.5 99.3 99.4 99.4 99.4 99.6 99.6 99.6 99.6 99.6 100.0 GE

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: JUL HOURS: ALL

			LST	TO UTC	: - 1					MONTH:	JOT HO	UKS: AL	b			
CEILING	IN GE GE GE GE GE GE GE GE GE GE															
	i GE	GE	GE	GR					GE	Œ	GE	GE	GE	GE	GE	GE
FEET	112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
									• • • • • •							
	1															
NO CEIL	37.7	38.7	41.5	42.1	43.0	43.1	43.3	43.5	43.6	43.7	43.7	43.8	43.8	43.8	43.8	43.8
	J															
GE 20000		43.9	47.1	47.9	49.0	49.2	49.4	49.6	49.7	49.8	49.9	49.9	49.9	49.9	50.0	50.1
GE 18000		43.9	47.2	48.0	49.1	49.3	49.5	49.7	49.8	49.9	50.0	50.0	50.0	50.0	50.1	50.2
GE 16000		43.9	47.2	48.0	49.1	49.3	49.5	49.7	49.8	49.9	50.0	50.0	50.0	50.0	50.1	50.2
GE 14000		44.3	47.6	48.3	49.4	49.7	49.8	50.0	50.1	50.2	50.3	50.3	50.4	50.4	50.4	50.6
GE 12000	43.5	44.7	48.1	48.8	50.0	50.2	50.4	50.6	50.7	50.8	50.9	50.9	50.9	50.9	51.0	51.1
GE 10000	46.4	47.6	51.2	52.0	53.2	53.5	53.7	53.9	54.0	54.1	54.2	54.2	54.2	54.2	54.3	54.4
GE 9000		48.7	52.5	53.4	54.7	55.0	55.2	55.4	55.5	55.6	55.7	55.7	55.8	55.8	55.8	56.0
GE 8000		53.0	57.0	57.9	59.2	59.6	59.8	60.0	60.2	60.3	60.4	60.4	60.5	60.5	60.5	60.7
GE 7000		53.5	57.7	58.6	60.0	60.3	60.6	60.8	60.9	61.0	61.1	61.2	61.2	61.2	61.2	61.4
GE 6000	1	54.1	58.4	59.3	60.7	61.0	61.3	61.5	61.7	61.8	61.9	61.9	61.9	62.0	62.0	62.2
GE 5000	55.4	56.9	61.4	62.4	63.7	64.1	64.4	64.6	64.8	64.9	65.0	65.1	65.1	65.1	65.2	65.4
GE 4500	58.0	59.5	64.3	65.4	66.8	67.2	67.5	67.8	67.9	68.1	68.2	68.2	68.2	68.3	68.3	68.5
GE 4000	63.1	64.8	70.2	71.4	73.0	73.4	73.8	74.1	74.2	74.4	74.5	74.5	74.6	74.6	74.7	74.9
GE 3500	67.4	69.3	75.1	76.3	78.0	78.5	78.9	79.2	79.3	79.5	79.6	79.7	79.7	79.7	79.8	80.0
GE 3000	70.8	72.8	79.2	80.5	82.4	83.0	83.5	83.8	83.9	84.1	84.2	84.3	84.3	84.4	84.4	84.6
GE 2500	1	74.2	80.7	82.0	84.1	84.6	85.1	85.4	85.6	85.8	85.9	86.0	86.0	86.0	86.1	86.3
GE 2000		76.0	82.9	84.2	86.3	86.8	87.4	87.8	87.9	88.1	88.3	88.3	88.4	88.4	88.5	88.7
GE 1800		76.8	83.7	85.1	87.2	87.7	88.3	88.7	88.8	89.0	89.2	89.2	89.3	89.4	89.4	89.6
GE 1500		78.8	86.2	87.6	89.8	90.4	91.0	91.4	91.6	91.8	91.9	92.0	92.0	92.1	92.2	92.4
GE 1200	77.4	79.7	87.2	88.7	91.1	91.7	92.3	92.7	92.9	93.1	93.3	93.3	93.4	93.4	93.5	93.7
1000			00.4									04.0			05.0	05.0
GE 1000		80.6	88.4	89.9	92.4	93.1	93.8	94.1	94.3	94.5	94.7	94.8	94.8	94.9	95.0	95.2
GE 800		81.0 81.2	89.0 89.5	90.7 91.2	93.2 93.8	93.9 94.4	94.5 95.1	94.9 95.5	95.1 95.7	95.3 95.9	95.5 96.1	95.6 96.2	95.6 96.2	95.7 96.3	95.8 96.4	96.0 96.6
GE 700		81.4	89.9	91.6	94.4	95.0	95.8	96.2	96.4	96.6	96.7	96.8	96.9	96.9	97.0	97.2
GE 600		81.8	90.8	92.5	95.3	96.0	96.7	97.1	97.3	97.6	97.7	97.8	97.8	97.9	98.0	98.2
3	'3.4	01.0	50.0	72.3	33.3	30.0	30.7	3,	37.3	37.0	3	37.0	37.10	31.5	30.0	30.2
GE 500	79.5	81.9	91.1	92.9	95.8	96.5	97.3	97.7	97.9	98.2	98.3	98.4	98.5	98.5	98.6	98.8
GE 400		81.9	91.2	93.1	96.1	96.8	97.7	98.2	98.5	98.7	98.9	98.9	99.0	99.0	99.1	99.4
GE 300		81.9	91.3	93.1	96.2	97.0	97.9	98.5	98.7	98.9	99.2	99.3	99.3	99.4	99.5	99.7
GB 200	1	81.9	91.3	93.1	96.2	97.1	97.9	98.6	98.8	99.1	99.3	99.4	99.5	99.5	99.6	99.9
GE 100		81.9	91.3	93.1	96.2	97.1	97.9	98.6	98.8	99.1	99.3	99.4	99.5	99.5	99.7	100.0
						=			-					-		
GE 000	79.6	81.9	91.3	93.1	96.2	97.1	97.9	98.6	98.8	99.1	99.3	99.4	99.5	99.5	99.7	100.0
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PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: AUG HOURS: 00-02 VISIBILITY IN METERS CEILING IN GR GR GE GR GE GE GE GE GR GE GE GE GR GR GR GR 32 20 FRET 112 90 80 60 48 40 24 16 12 10 08 06 04 00 NO CEIL 49.9 51.7 55.2 55.9 57.5 58.3 58.7 58.7 58.7 58.8 59.1 59.1 59.1 59.3 59.5 GE 20000 53.3 55.2 59.9 62.6 62.6 62.6 62.7 63.1 59.1 61.4 62.2 63.1 63.1 63.2 63.4 63.4 GE 18000 53.3 55.2 59.1 59.9 62.2 62.6 62.6 62.6 62.7 63.1 63.2 63.4 61.4 63.1 63.1 63.4 GE 160001 53.3 55.2 59.1 59.9 61.4 62.2 62.6 62.6 62.6 62.7 63.1 63.1 63.1 63.2 63.4 63.4 GE 14000 53.3 55.2 59.1 59.9 61.4 62.2 62.6 62.6 62.5 62.7 63.1 63.1 63.1 63.2 63.4 63.4 62.8 63.0 GR 12000 53.4 55.4 59.4 60.1 61.6 62.5 62.8 62.8 63.3 63.3 63.3 63.4 63.7 63.7 67.1 67.1 67.3 GR 10000 56.2 58.3 62.8 63.9 65.7 66.7 67.1 67.6 67.6 67.6 67.7 68.0 68.0 GE 9000 57.0 59.3 65.0 67.7 68.2 68.2 68.2 68.3 68.7 68.7 63.9 66.8 68.7 68.8 69.1 69.1 GE 8000 59.9 62.1 68.3 70.1 71.6 71.6 71.6 71.7 72.0 72.0 72.4 67.1 71.1 72.0 72.2 72.4 GE 7000 60.3 62.8 67.9 69.3 71.1 72.3 72.9 72.9 72.9 73.0 73.4 73.4 73.4 73.5 73.7 73.7 GE 6000 60.8 63.3 68.5 69.9 71.7 72.9 73.5 73.5 73.5 73.6 74.0 74.0 74.0 74.1 74.3 74.3 GE 5000 65.5 70.7 72.2 74.0 75.7 75.7 75.7 75.9 76.2 76.2 63.0 75.1 76.2 76.3 76.6 76.6 GE 4500 66.1 68.6 75.5 77.3 78.5 79.1 79.1 79.1 79.2 79.6 79.6 79.6 79.7 79.9 74.1 79.9 GR 4000 68.6 71.1 77.1 78.5 80.3 81.6 82.2 82.3 82.3 82.4 82.8 82.8 82.8 83.0 83.3 83.3 87.3 87.6 GR 3500 71.4 74.1 80.3 82.0 84.2 85.5 86.1 86.4 86.4 86.7 87.1 87.1 87.1 37.6 87.1 87.7 GE 3000 72.6 75.5 81.8 83.5 85.8 87.9 87.9 88.3 88.6 88.6 88.6 88.9 89.1 89.1 GE 2500 73.0 75.9 82.2 84.0 86.6 87.9 88.6 88.9 88.9 89.2 89.6 89.6 89.8 90.1 90.3 90.3 GR 2000 73.6 76.5 83.2 85.1 87.7 89.4 90.1 90.4 90.4 90.8 91.2 91.2 91.4 91.6 91.9 91.9 GE 1800 73.7 76.6 83.3 85.2 87.8 89.5 90.3 90.7 90.7 91.0 91.4 91.4 91.6 91.9 92.1 92.1 GE 1500 77.2 85.8 91.0 91.4 91.8 92.1 92.6 92.8 74.2 83.9 88.5 90.2 91.4 92.1 92.4 92.8 GE 1200 75.1 78.3 86.9 91.4 92.2 92.6 92.6 93.0 93.3 93.3 93.5 84.9 89.7 93.8 94.0 GE 1000 75.4 78.5 85.2 87.1 90.0 91.6 92.5 92.8 92.8 93.2 93.5 93.5 93.8 94.0 94.3 94.3 GE 900 75.6 78.9 85.5 87.5 90.3 92.0 93.0 93.3 93.3 93.7 94.0 94.0 94.3 94.5 94.7 94.7 93.7 94.4 GR ROOL 75.7 79.0 85.8 87.7 90.7 92.4 93.3 93.7 94.0 94.6 94.9 95.1 94.4 95.1 GE 700 75.9 79.2 86.0 88.2 91.2 92.8 93.8 94.5 94.5 94.9 95.2 95.2 95.5 95.7 95.9 95.9 95.8 96.1 94.6 GE 600 75.9 79.2 88.3 91.3 93.0 93.9 94.6 95.0 95.3 86.1 95.3 95.6 96.1 GE 500 76.1 79.5 86.5 88.6 92.1 93.8 94.9 95.7 95.7 96.2 96.5 96.5 96.8 97.0 97.3 97.3 97.4 96.4 GR 400 76.2 79.6 87.0 89.1 92.6 94.3 95.3 96.3 96.9 97.4 97.6 97.8 98.1 98.1 GR 300 76.2 79.6 87.0 89.1 92.8 94.6 95.8 96.8 96.9 97.4 97.8 97.8 98.1 98.3 98.6 98.6 200 76.2 79.6 96.9 98.2 GE 87.0 89.1 92.8 94.6 95.8 96.8 97.5 98.0 98.0 98.4 98.9 98.9 GE 100 76.2 79.6 87.0 89.1 92.8 94.6 95.8 96.8 96.9 97.5 98.0 98.0 98.4 98.7 99.2 99.9 GE 000 76.2 79.6 87.0 89.1 92.8 94.6 95.8 96.8 96.9 97.5 98.0 98.0 98.4 98.8 99.3 100.0

TOTAL NUMBER OF OBSERVATIONS 837

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 MONTH: AUG HOURS: 03-05 LST TO UTC: - 1 CEILING VISIBILITY IN METERS TN GE Œ GE GR GE ge ge GE GR Œ GE GR GE Œ GE Œ 48 90 FERT 112 80 60 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 36.2 37.6 43.5 44.3 46.6 47.0 47.9 48.7 49.1 50.1 50.4 50.7 50.7 50.9 51.3 51.4 GE 20000 39.7 41.2 47.3 48.3 50.9 51.3 52.4 53.3 53.6 54.6 55.0 55.2 55.2 55.6 55.9 56.0 GE 18000 39.7 41.2 47.3 48.3 50.9 51.3 52.4 53.3 53.6 54.6 55.0 55.2 55.2 55.6 55.9 56.0 GE 16000 39.7 41.2 47.3 48.3 50.9 53.3 53.6 54.6 55.0 55.2 55.2 55.6 55.9 51.3 52.4 56.0 GE 14000 39.7 41.2 47.3 48.3 50.9 51.3 52.4 53.3 53.6 54.7 55.1 55.3 55.3 55.7 56.0 56.2 GE 12000 39.7 41.2 47.4 48.4 51.0 51.4 52.6 53.4 53.8 54.8 55.2 55.4 55.4 55.8 56.2 56.3 GE 10000 41.3 57.1 58.2 43.1 49.9 51.1 54.1 54.7 55.9 56.8 58.5 58.8 58.8 59.1 59.5 Œ 9000 42.3 44.1 50.9 57.9 58.3 59.4 59.7 60.0 60.0 60.3 60.7 52.1 55.3 55.9 57.1 60.9 Œ 8000 45.3 47.4 54.7 55.9 59.3 60.0 61.2 62.0 62.4 63.4 63.8 64.0 64.0 64.4 64.8 65.0 Œ 7000 46.0 48.1 55.4 56.8 60.1 60.8 62.2 63.4 63.8 65.0 65.4 65.6 65.6 66.1 66.4 66.7 6000 46.2 CE 48.4 55.7 57.0 60.3 61.1 62.5 63.7 64.0 65.2 65.6 65.8 65.8 66.3 66.7 66.9 Œ 5000 47.4 49.7 63.9 67.0 67.3 67.3 67.7 57.1 58.4 61.8 62.5 65.1 65.5 66.7 68.1 68.3 Œ 4500 50.2 52.4 60.2 61.5 64.9 65.6 67.0 68.3 68.7 69.9 70.3 70.5 70.5 71.0 71.3 71.6 Œ 4000 53.8 56.4 64.8 66.4 69.8 70.5 71.9 73.4 73.7 75.0 75.4 75.6 75.7 76.2 76.6 76.8 79.7 3500 56.9 Œ 59.5 68.0 69.7 73.0 73.8 75.4 76.9 77.4 78.7 79.2 79.5 80.2 80.5 80.8 Œ 3000 58.4 61.1 70.5 72.3 75.7 76.7 78.5 80.5 81.1 82.4 83.0 83.3 83.6 84.1 84.5 84.7 Œ 2500 59.1 61.8 71.2 73.0 76.5 77.8 79.6 81.6 82.2 83.5 84.1 84.3 84.7 85.2 85.5 Œ 2000 60.5 63.2 73.1 75.0 78.6 79.9 81.8 83.9 84.5 85.8 86.4 86.6 87.0 87.5 87.8 88.1 1800 GR 60.9 63.8 73.8 75.9 79.5 80.8 82.7 84.7 85.3 86.6 87.2 87.5 87.8 88.3 88.6 88.9 Œ 1500 61.5 64.5 74.6 76.6 80.2 81.5 83.4 85.4 86.3 87.6 88.2 88.4 88.8 89.2 89.6 89.8 Œ 1200 62.2 65.2 90.8 75.5 77.5 81.2 82.6 84.5 86.6 87.5 88.8 89.4 89.6 90.0 90.4 91.0 GR 1000 62.7 65.9 76.3 78.4 82.1 83.5 85.5 87.8 88.6 90.0 90.6 90.8 91.2 91.6 92.0 92.2 Œ 900 62.8 78.5 66.1 76.5 82.2 83.6 85.7 87.9 88.88 90.1 90.7 90.9 91.3 91.8 92.1 92.4 Œ 800 63.3 66.5 77.1 79.1 82.8 84.2 86.4 88.6 89.5 90.8 91.4 91.6 92.0 92.5 92.8 93.1 83.0 92.2 92.8 Œ 700 63.6 66.8 77.3 79.3 84.5 86.6 88.9 89.7 91.0 91.6 91.9 92.7 93.1 93.3 GE 600 63.9 67.1 77.8 79.8 83.5 84.9 87.1 89.4 90.2 91.5 92.2 92.5 93.3 93.7 93.9 67.3 87.7 Œ 500 64.0 78.0 80.2 84.0 85.5 90.2 91.2 92.6 93.3 93.5 93.9 94.4 94.7 95.0 Œ 400 64.0 67.3 78.0 80.4 84.2 86.0 88.2 90.7 91.6 93.2 93.9 94.1 94.5 95.0 95.3 95.6 67.4 GR 300 64.2 78.1 84.3 88.3 93.5 94.3 94.5 95.0 95.5 95.8 80.5 86.1 90.8 92.0 96.1 CE 200 64.2 67.4 78.1 80.5 84.3 86.1 88.3 90.9 92.1 93.8 94.5 94.7 95.6 96.2 96.9 97.1 CIR. 100 64.2 67.4 97.7 78.1 80.5 84.5 86.4 88.5 91.2 94.0 94.7 95.1 95.9 96.8 92.4 99.8

TOTAL NUMBER OF OBSERVATIONS 837

GR 000 64.2 67.4 78.1 80.5 84.5 86.4 88.5 91.2 92.4 94.0 94.7 95.1 95.9 96.8 97.7 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: AUG HOURS: 06-08 CEILING VISIBILITY IN METERS GR GE GE GE Œ GE GE GE Œ GE GR GE IN Œ GR GE GR FEET 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 20.3 21.3 27.8 28.7 31.9 33.0 34.2 35.5 36.0 36.9 37.0 37.4 37.8 37.9 38.0 38.7 GR 20000 23.4 24.5 31.2 32.3 35.8 36.9 38.1 39.4 39.9 40.9 41.0 41.3 41.7 41.8 41.9 42.8 37.0 39.5 **GE 18000** 23.5 24.6 31.3 32.4 36.0 38.2 40.0 41.0 41.1 41.5 41.8 41.9 42.1 42.9 36.0 42.1 42.9 GR 16000 23.5 32.4 37.0 38.2 40.0 24.6 31.3 39.5 41.0 41.1 41.5 41.8 41.9 GE 14000 23.9 25.0 31.7 32.7 36.3 37.4 38.6 39.9 40.4 41.3 41.5 41.8 42.2 42.4 43.2 42.3 GE 12000 24.4 25.4 32.5 37.3 38.4 39.5 40.9 41.3 42.8 43.4 33.6 42.3 42.4 43.1 43.2 44.3 **GE 10000** 28.0 36.1 37.5 41.3 42.5 43.7 45.3 45.8 46.7 46.8 47.2 47.6 GE 9000 27.5 28.7 37.3 38.8 47.1 48.0 48.1 42.7 43.8 45.0 46.6 48.5 48.9 49.0 49.2 50.2 GE 8000 30.7 32.1 41.1 42.9 47.0 48.5 49.7 51.4 52.0 52.9 53.0 53.5 53.9 54.0 54.2 55.3 7000 31.2 32.6 43.6 47.8 49.3 50.7 GE 41.8 52.3 53.3 54.2 54.4 54.8 55.2 55.4 55.7 56.8 GE 6000 31.5 33.0 42.2 44.1 48.3 49.8 51.1 52.8 53.8 54.7 54.8 55.3 55.7 55.9 56.2 57.2 GE 5000 32.6 34.1 43.6 51.5 52.8 55.6 57.1 57.6 45.6 49.9 54.6 56.5 56.6 57.8 58.1 59.1 CE 4500 34.6 36.4 46.1 48.1 52.6 54.2 55.R 57.7 58.7 59.7 60.0 60.5 60.9 61.2 61.4 62.5 GE 4000 37.6 39.4 49.9 52.2 56.8 58.5 60.3 62.2 63.3 64.4 64.6 65.1 65.6 65.8 66.1 67.1 GR 3500 39.8 41.6 52.8 55.4 60.1 61.9 63.8 65.8 67.1 68.6 68.8 69.3 69.8 70.0 70.6 71.7 GE 3000 42.1 44.0 55.6 58.2 63.2 65.2 67.1 69.7 71.2 72.8 73.0 73.5 74.0 74.2 74.9 76.0 GE 2500 43.0 44.9 56.5 59.3 64.4 66.4 68.3 70.8 72.4 74.0 74.2 74.7 75.1 75.4 76.3 77.4 GE 2000 45.0 47.1 59.0 61.9 67.4 69.7 71.8 74.4 76.0 77.5 77.9 78.4 78.9 79.1 80.0 81.1 GE 1800 45.8 47.8 59.7 62.6 68.1 70.4 72.6 75.3 76.9 78.5 78.9 79.3 79.8 80.0 81.0 82.1 GE 1500 47.2 49.2 61.3 64.3 70.3 72.5 74.8 77.4 79.1 80.6 81.0 81.5 82.0 82.2 83.2 84.2 74.7 GE 1200 48.5 50.7 62.8 65.8 71.8 77.2 79.8 81.5 83.0 83.4 83.9 84.3 84.6 85.5 86.6 GE 1000 49.1 63.9 75.7 51.3 66.9 72.9 78.4 81.1 82.8 84.3 84.7 85.3 85.8 86.0 87.0 88.1 GE 900 49.8 52.0 65.0 68.0 74.0 76.9 79.6 82.3 84.0 85.7 86.0 86,6 87.1 87.3 88.3 89.4 GE 800 50.3 52.4 65.5 68.7 74.7 77.8 80.4 83.2 84.8 86.5 86.9 87.5 88.1 89.2 88.3 90.3 ar 700 50.5 87.6 52.7 66.5 69.8 75.7 78.9 81.5 84.2 85.9 87.9 88.5 89.2 89.6 90.6 91.6 GE 600 50.8 52.9 67.0 70.3 76.3 79.5 82.1 84.8 86.7 88.4 88.9 89.5 90.2 90.6 91.5 92.6 GE 500 50.9 53.0 67.4 70.6 76.8 79.9 82.7 85.7 87.8 89.6 90.1 90.7 91.8 92.1 93.1 94.1 GE 400 50.9 53.0 67.5 70.7 77.1 80.3 83.0 86.1 88.4 90.3 90.8 91.4 92.5 93.8 95.2 92.8 50.9 67.5 CR 300 53.0 70.7 77.1 80.4 83.3 86.9 89.4 91.5 92.0 92.7 93.8 94.1 95.2 96.7 GE 200 50.9 53.0 67.5 70.7 77.1 80.4 83.3 86.9 89.5 91.8 92.2 93.1 94.1 94.7 95.8 97.8 GE 100 67.5 70.7 80.4 50.9 53.0 77.1 83.3 86.9 89.5 91.9 92.4 93.2 94.3 96.8 95.0 99.9 GE 000 50.9 53.0 67.5 70.7 77.1 80.4 83.3 86.9 89.5 91.9 92.4 93.2 94.3 95.0 96.8 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 STATION NUMBER: 106070 LST TO UTC: - 1 MONTH: AUG HOURS: 09-11 CRITIING VISIBILITY IN METERS IN GE GR GE GE GE Œ GE GE GR Œ GE Œ GE GE GE GR 112 FERT 90 80 48 32 24 20 16 10 08 06 04 00 60 40 12 NO CEIL 28.3 29.5 35.2 36.1 37.9 38.2 38.5 38.6 38.8 39.1 39.2 39.2 39.2 39.3 39.3 39.3 GE 20000 40.6 44.0 44.4 44.6 44.6 33.5 34.6 41.5 43.2 43.6 43.8 44.2 44.6 44.7 44.7 44.7 GR 18000 33.5 34.6 40.6 41.5 43.2 43.6 43.8 44.0 44.2 44.4 44.6 44.6 44.6 44.7 44.7 44.7 GE 16000 33.5 34.6 40.6 41.5 43.2 43.6 43.8 44.0 44.2 44.4 44.6 44.6 44.6 44.7 44.7 44.7 GB 14000 44.4 44.6 44.8 45.0 45.2 45.2 45.3 45.3 34.1 35.2 41.2 42.1 43.8 44.2 45.2 45.3 **GE 12000** 35.8 41.9 42.8 44.6 45.0 45.3 45.4 45.6 45.9 46.0 46.0 46.0 46.1 46.1 46.1 34.6 GR 10000 37.3 38.5 44.9 45.8 47.9 48.5 48.9 49.0 49.2 49.5 49.6 49.6 49.6 49.7 49.7 49.7 39.3 50.2 50.4 50.7 50.8 50.8 50.8 Œ 9000 38.1 46.0 46.8 49.0 49.6 50.1 50.9 50.9 50.9 54.6 Œ 8000 41.7 42.9 50.3 51.1 53.3 54.0 54.7 55.0 55.2 55.3 55.3 55.3 55.4 55.4 55.4 Œ 7000 43.1 50.7 51.5 53.8 54.5 55.2 55.3 55.6 55.8 55.9 55.9 55.9 56.0 56.0 56.0 41.9 Œ 6000 54.1 55.6 55.7 55.9 56.2 56.3 56.3 56.3 56.4 56.4 42.3 43.5 51.0 51.9 54.8 56.4 Œ 52.2 57.0 57.2 57.5 57.6 57.6 57.6 57.7 5000 43.2 53.0 55.3 56.2 56.9 57.7 57.7 4500 46.0 53.9 58.5 58.8 59.0 59.3 59.4 59.4 GE 44.7 54.7 57.0 57.8 59.4 59.5 59.5 59.5 Œ 4000 48.0 49.5 57.7 58.5 60.9 61.9 62.8 63.1 63.3 63.6 63.7 63.7 63.7 63.8 63.8 63.8 Œ 3500 51.0 52.6 61.5 62.6 65.2 66.5 67.6 68.0 68.2 68.5 68.6 68.6 68.6 68.7 68.7 68.7 76.3 57.9 76.2 76.3 Œ 3000 56.2 67.7 69.1 72.2 73.5 74.9 75.6 75.9 76.1 76.2 76.2 76.3 Œ 2500 57.6 59.7 69.8 75.6 77.1 77.8 78.0 78.3 78.4 78.4 78.4 78.5 78.5 78.5 71.1 74.3 GR 2000 60.5 63.0 74.0 75.3 78.5 79.8 81.2 82.0 82.2 82.4 82.6 82.6 82.6 82.7 82.7 82.7 GR 1800 61.1 63.6 74.6 75.9 79.1 80.4 82.0 82.7 82.9 83.2 83.3 83.3 83.3 83.4 83.4 83.4 1500 78.0 79.7 87.6 87.8 87.9 Œ 63.9 66.8 83.5 84.9 86.5 87.2 87.9 87.9 88.1 88.1 88.1 Œ 1200 80.0 90.3 90.7 90.8 90.8 90.8 65.4 68.2 82.0 85.9 87.5 89.1 90.0 90.9 90.9 90.9 GR 1000 66.4 69.3 81.2 83.2 87.3 89.0 90.8 91.6 92.1 92.5 92.6 92.6 92.7 92.8 92.8 92.8 82.1 93.7 Œ 900 66.8 69.8 84.2 88.4 90.1 92.0 92.8 93.3 93.8 93.8 94.0 94.1 94.1 94.1 GR 800 69.9 82.3 88.6 92.2 93.5 93.9 66.9 84.5 90.3 93.1 94.0 94.0 94.3 94.4 94.4 94.4 Œ 700 67.4 70.4 82.8 84.9 89.7 91.4 93.3 94.3 94.7 95.1 95.3 95.3 95.6 95.7 95.7 95.7 Œ 600 67.4 70.5 83.3 85.4 90.9 96.4 96.8 97.0 97.0 97.3 97.4 97.4 92.6 94.6 95.7 97.4 Œ 500 67.6 70.7 83.5 85.7 91.3 93.1 95.3 96.4 97.3 97.6 98.0 98.0 98.2 98.3 98.3 98.3 GR 400 70.7 83.5 97.8 98.3 98.9 67.6 85.7 91.8 93.5 95.8 96.9 98.7 98.7 99.0 99.0 99.2 GE 300 67.6 70.7 83.5 85.7 91.8 93.5 95.8 96.9 97.8 98.3 98.7 98.7 98.9 99.0 99.0 99.2 200 83.5 98.4 Œ 67.6 70.7 85.7 91.8 96.9 97.8 99.0 99.0 99.4 93.5 95.8 99.5 99.5 99.8 **GR** 100 67.6 70.7 83.5 85.7 91.8 93.5 95.8 96.9 97.8 98.4 99.2 99.2 99.5 99.6 99.6 100.0

TOTAL NUMBER OF OBSERVATIONS 837

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000 67.6 70.7 83.5 85.7 91.8 93.5 95.8 96.9 97.8 98.4 99.2 99.2 99.5 99.6 99.6 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: JAN 80 - DEC 89 STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY LST TO UTC: - 1 MONTH: AUG HOURS: 12-14 CEILING VISIBILITY IN METERS Œ GE GE GE GE GE GR GR GR GE Œ GE IN Œ GE Œ GR FEET 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 32.4 34.4 36.1 36.2 36.3 36.3 36.3 36.3 36.3 36.3 36.3 36.3 36.3 36.3 36.3 36.3 GE 20000 39.5 43.7 44.0 44.0 44.0 44.0 44.0 44.0 41.9 43.8 44.0 44.0 44.0 44.0 44.0 GE 18000 39.5 41.9 43.7 43.8 44.0 44.0 44.0 44.0 44.0 44.0 44.0 44.0 44.0 44.0 44.0 44.0 **GE 16000** 39.5 41.9 43.7 43.8 44.0 44.0 44.0 44.0 44.0 44.0 44.0 44.0 44.0 44.0 44.0 44.0 GE 14000 40.3 42.7 44.4 44.6 44.7 44.7 44.7 44.7 44.7 44.7 44.7 44.7 44.7 44.7 44.7 44.7 40.9 45.3 45.3 45.3 GR 12000 45.0 45.2 45.3 45.3 45.3 45.3 45.3 45.3 45.3 45.3 45.3 43.2 GE 10000 43.2 45.6 47.4 47.6 47.7 47.7 47.7 47.7 47.7 47.7 47.7 47.7 47.7 47.7 47.7 GR 9000 43.6 46.0 47.8 47.9 48.0 48.0 48.0 48.0 48.0 48.0 48.0 48.0 48.0 48.0 48.0 48.0 50.8 GE 8000 45.8 48.7 50.5 50.7 50.8 50.8 50.8 50.8 50.8 50.8 50.8 50.8 50.8 50.8 50.8 47.1 7000 50.1 51.9 52.1 52.1 52.1 52.1 52.1 52.1 52.1 52.1 52.1 GE 52.0 52.1 52.1 52.1 6000 47.2 50.2 52.2 52.2 52.2 52.2 52.2 52.2 52.2 52.2 52.2 52.2 GE 52.0 52.1 52.2 GE 5000 49.3 52.3 54.6 54.8 55.1 55.1 55.1 55.1 55.1 55.1 55.1 55.1 55.1 55.1 55.1 55.1 GE 4500 51.9 57.5 57.7 57.9 57.9 57.9 57.9 57.9 57.9 57.9 57.9 57.9 57.9 57.9 57.9 54.8 64.5 64.5 GR 4000 57.3 60.8 64.0 64.3 64.5 64.5 64.5 64.5 64.5 64.5 64.5 64.5 64.5 64.5 3500 71.4 71.9 72.5 72.5 72.5 72.5 72.5 72.5 72.5 72.5 72.5 72.5 72.5 72.5 GE 63.0 67.1 GE 3000 71.8 76.8 83.5 83.8 83.8 83.8 83.8 83.8 83.8 83.8 83.8 83.8 81.8 82.4 83.6 83.8 GE 2500 74.6 79.8 85.1 85.8 87.0 87.1 87.2 87.2 87.2 87.2 87.2 87.2 87.2 87.2 87.2 87.2 GE 2000 77.7 83.2 88.8 89.5 90.7 90.8 90.9 90.9 90.9 90.9 90.9 90.9 90.9 90.9 90.9 90.9 91.5 91.5 91.5 GE 1800 78.0 83.5 89.2 90.0 91.2 91.4 91.5 91.5 91.5 91.5 91.5 91.5 91.5 94.1 94.1 GR 1500 79.6 85.1 91.3 92.1 93.3 93.8 94.0 94.1 94.1 94.1 94.1 94.1 94.1 94.1 GE 1200 81.1 86.7 93.3 94.3 95.5 95.9 96.2 96.4 96.4 96.5 96.5 96.5 96.5 96.5 96.5 96.5 97.6 GR 1000 81.8 87.5 94.1 95.1 96.5 97.0 97.3 97.5 97.5 97.6 97.6 97.6 97.6 97.6 97.6 GE 900 82.1 87.7 95.1 96.1 97.5 98.0 98.2 98.4 98.4 98.6 98.6 98.6 98.6 98.6 98.6 98.6 98.9 GE 800 82.3 87.9 95.3 96.3 97.7 98.2 98.6 98.8 98.8 98.9 98.9 98.9 98.9 98.9 98.9 GR 700 82.7 88.3 95.8 96.8 98.2 98.7 99.0 99.3 99.3 99.4 99.4 99.4 99.4 99.4 99.4 99.4 GE 600 82.7 88.3 95.9 97.1 98.6 99.4 99.6 99.6 99.8 99.8 99.8 99.8 99.8 99.8 99.0 99.8 GE 500 82.8 88.4 96.1 97.3 98.7 99.2 99.6 99.9 99.9 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 GE 400 82.8 88.4 96.1 97.3 98.7 99.2 99.6 99.9 99.9 GE 300 82.8 88.4 96.1 97.3 98.7 99.2 99.6 99.9 99.9 100.0 100.0 100.0 100.0 100.0 100.0 100.0 97.3 99.6 99.9 99.9 100.0 100.0 100.0 100.0 100.0 100.0 GE 200 82.8 88.4 96.1 98.7 99.2 GE 100 82.8 88.4 96.1 97.3 98.7 99.2 99.6 99.9 99.9 100.0 100.0 100.0 100.0 100.0 100.0 GE 000 82.8 88.4 96.1 97.3 98.7 99.2 99.6 99.9 99.9 100.0 100.0 100.0 100.0 100.0 100.0

TOTAL NUMBER OF OBSERVATIONS 837

D - 2 - 68

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 STATION NUMBER: 106070 MONTH: AUG HOURS: 15-17 LST TO UTC: - 1 VISIBILITY IN METERS CEILING GR GR Œ GR GR GE Œ TN GR CIR GR Œ GR GR GR GR GE FEET 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 34.4 35.1 35.1 35.1 35.1 35.1 35.1 35.1 35.1 35.1 35.1 35.1 35.1 35.1 33.3 35.1 GR 20000 42.7 44.2 45.5 45.9 GE 18000 42.7 44.2 45.5 45.9 45.9 45.9 45.9 45.9 GE 16000 42.7 44.2 45.5 45.9 45.9 45.9 45.9 45.9 45.9 45.9 45.9 45.9 45.9 45.9 45.9 45.9 GE 14000 43.0 44.6 45.9 46.2 46.2 46.2 46.2 46.2 46.2 46.2 46.2 46.2 46.2 46.2 46.2 46.2 47.4 GE 12000 43.6 45.5 47.1 47.4 47.4 47.4 47.4 47.4 47.4 47.4 47.4 47.4 47.4 47.4 47.4 GE 10000 47.3 49.8 52.0 52.3 52.4 52.4 52.4 52.4 52.4 52.4 52.4 52.4 52.4 52.4 52.4 52.4 GR 9000 47.6 50.1 52.3 52.7 52.8 52.8 52.8 52.8 52.8 52.8 52.8 52.8 52.8 52.8 52.8 52.8 GE 8000 52.1 55.0 57.3 57.7 57.8 57.8 57.8 57.8 57.8 57.8 57.8 57.8 57.8 57.8 57.8 57.8 GR 7000 58.7 58.7 58.7 58.7 58.7 58.7 52.6 55.6 58.2 58.5 58.7 58.7 58.7 58.7 58.7 58.7 Œ 6000 52.7 55.7 58.3 58.7 58.8 58.8 58.8 58.8 58.8 58.8 58.8 58.8 58.8 58.8 58.8 58.8 GE 5000 56.0 59.3 62.0 62.4 62.5 62.5 62.5 62.5 62.5 62.5 62.5 62.5 62.5 62.5 62.5 62.5 Œ 4500 60.3 63.8 66.7 67.0 67.1 67.1 67.1 67.1 67.1 67.1 67.1 67.1 67.1 67.1 67.1 4000 Œ 68.9 72.8 76.0 76.3 76.5 76.5 76.5 76.5 76.5 76.5 76.5 76.5 76.5 76.5 76.5 76.5 CE 3500 74.3 78.5 82.4 82.9 83.8 84.0 84.1 84.1 84.1 84.1 84.1 84.1 84.1 84.1 84.1 84.1 Œ 3000 78.7 87.9 90.3 83.3 88.6 89.6 89.8 90.3 90.3 90.3 90.3 90.3 90.3 90.3 90.3 90.3 Œ 2500 80.3 84.8 89.7 90.6 91.5 91.8 92.2 92.2 92.2 92.2 92.2 92.2 92.2 92.2 92.2 Œ 2000 82.6 87.2 92.5 93.3 94.4 94.6 95.1 95.1 95.1 95.1 95.1 95.1 95.1 95.1 95.1 95.1 GE 1800 82.8 87.6 92.8 93.7 94.7 95.0 95.5 95.5 95.5 95.5 95.5 95.5 95.5 95.5 95.5 95.5 97.1 Œ 1500 84.1 88.9 94.5 95.3 96.4 96.7 97.1 97.1 97.1 97.1 97.1 97.1 97.1 97.1 \$7.1 97.5 GR 1200 84.7 89.5 95.2 96.2 97.3 98.0 98.0 98.0 98.0 98.0 98.0 98.0 98.0 98.0 98.0 Œ 1000 85.2 90.0 95.8 98.0 98.2 98.7 98.7 98.7 98.7 98.7 98.7 98.7 98.7 98.7 96.8 98.7 CE 900 85.3 90.1 95.9 96.9 98.1 98.3 98.9 98.9 98.9 98.9 98.9 98.9 98.9 98.9 98.9 98.9 GE 800 85.4 90.2 96.1 97.0 98.2 98.4 99.0 99.0 99.0 99.0 99.0 99.0 99.0 99.0 99.0 99.0 99.5 CR 700 85.5 90.3 96.5 97.5 98.7 98.9 99.5 99.5 99.5 99.5 99.5 99.5 99.5 99.5 99.5 Œ 600 85.7 90.4 96.7 97.6 98.9 99.2 99.8 99.8 99.8 99.8 99.8 99.8 99.8 99.8 99.8 99.8 Œ 500 85.7 90.4 96.7 97.6 98.9 99.3 99.9 99.9 99.9 99.9 99.9 99.9 99.9 99.9 y9.9 99.9 GE 400 85.8 90.6 96.8 97.7 99.0 99.4 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 85.8 90.6 GR 300 97.7 99.0 99.4 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0

TOTAL NUMBER OF OBSERVATIONS 837

90.6

90.6

GE

GR

200

100

85.8

85.8

000 85.8

96.8

96.8

96.8

97.7

97.7

99.0

99.0

D - 2 - 69

90.6 96.8 97.7 99.0 99.4 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0

99.4 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0

99.4 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 STATION NUMBER: 106070 MONTH: AUG HOURS: 18-20 LST TO UTC: - 1 VISIBILITY IN METERS CEILING GE GR IN Œ GR GR. GR CR GR GR GR Œ GR GE GE Œ GE FRET 112 90 80 60 48 40 32 24 20 16 12 10 80 06 04 00 NO CEIL 42.1 44.2 45.0 45.2 45.3 45.3 45.3 45.3 45.3 45.3 45.3 45.3 45.3 45.3 45.3 45.3 GE 20000 50.3 52.8 54.0 54.4 54.6 54.6 54.6 54.6 54.6 54.6 54.6 54.6 54.6 54.6 54.6 54.6 54.6 54.6 54.6 54.6 54.6 54.6 GE 18000 50.3 52.8 54.0 54.4 54.6 54.6 54.6 54.6 54.6 GE 16000 50.3 52.8 54.0 54.4 54.6 54.6 54.6 54.6 54.6 54.6 54.6 54.6 54.6 54.6 54.6 54.6 GE 14000 50.8 53.3 54.5 54.8 55.1 55.1 55.1 55.1 55.1 55.1 55.1 55.1 55.1 55.1 55.1 55.1 GE 12000 52.0 56.3 56.3 56.3 56.3 56.3 56.3 56.3 54.5 55.7 56.0 56.3 56.3 56.3 56.3 56.3 54.6 **GE 10000** 57.3 58.7 59.0 59.7 59.9 59.9 59.9 59.9 59.9 59.9 59.9 59.9 59.9 59.9 59.9 GE 9000 56.4 59.1 60.6 60.9 61.8 62.0 62.0 62.0 62.0 62.0 62.0 62.0 62.0 62.0 62.0 62.0 GE 8000 59.5 62.6 64.3 64.6 65.5 65.7 65.7 65.7 65.7 65.7 65.7 65.7 65.7 65.7 65.7 65.7 GE 7000 67.1 67.3 67.3 60.7 63.8 65.7 66.9 67.1 67.3 67.3 67.3 67.3 67.3 67.3 66.1 67.3 GΕ 6000 61.1 64.2 66.1 66.4 67.3 67.5 67.5 67.6 67.6 67.6 67.6 67.6 67.6 67.6 67.6 67.6 GE 5000 66.4 69.5 71.7 72.0 72.9 73.1 73.1 73.2 73.2 73.2 73.2 73.2 73.2 73.2 73.2 73.2 GE 4500 70.8 74.1 76.3 76.7 77.5 77.8 77.8 77.9 77.9 77.9 77.9 77.9 77.9 77.9 77.9 77.9 84.5 84.5 GE 4000 76.0 79.8 82.8 83.2 84.1 84.3 84.3 84.5 84.5 84.5 84.5 84.6 84.6 84.6 GE 3500 79.9 83.9 87.2 87.6 88.5 88.9 89.1 89.2 89.2 89.4 89.4 89.4 89.4 89.5 89.5 89.5 92.7 93.0 GE 3000 82.6 86.7 90.4 90.8 91.8 92.5 92.8 92.8 93.0 93.0 93.1 93.1 93.0 93.1 GE 2500 83.5 87.7 91.5 91.9 92.8 93.5 93.8 93.9 93.9 94.0 94.0 94.0 94.0 94.1 94.1 94.1 GR 2000 85.1 93.7 94.6 95.3 95.7 95.7 95.8 95.8 95.8 95.9 RQ.A 93.3 95.6 95.A 95.9 95.9 GE 1800 85.2 89.5 93.4 93.8 94.7 95.5 95.7 95.8 95.8 95.9 95.9 95.9 95.9 96.1 96.1 96.1 GE 1500 85.7 90.0 94.0 94.4 95.3 96.1 96.3 96.4 96.4 96.5 96.5 96.5 96.5 96.7 96.7 96.7 GE 1200 86.9 91.2 95.5 95.9 97.1 98.0 98.3 98.4 98.4 98.6 98.6 98.6 98.6 98.7 98.7 98.7 GE 87.0 91.3 95.7 97.4 98.3 98.7 98.8 98.8 98.9 98.9 98.9 98.9 99.0 1000 96.2 99.0 99.0 GR 900 87.0 91.3 95.7 96.2 97.4 98.3 98.7 98.8 98.8 98.9 98.9 98.9 98.9 99.0 99.0 99.0 GE 800 87.0 91.3 95.8 96.3 97.8 98.8 99.2 99.3 99.3 99.4 99.4 99.4 99.4 99.5 99.5 99.5 **GR** 700 87.0 95.8 96.3 GR. R 99.3 99.3 99.4 99.4 99.4 99.4 99.5 99.5 91.3 97.8 99.2 99.5 GE 600 87.0 91.3 95.8 96.3 97.8 98.8 99.2 99.5 99.5 99.6 99.6 99.6 99.6 99.8 99.8 99.8 GR 500 87.0 91.3 95.9 96.4 98.1 99.0 99.4 99.8 99.8 99.9 99.9 99.9 99.9 100.0 100.0 100.0 GΕ 400 87.0 91.3 95.9 96.4 98.1 99.0 99.4 99.8 99.8 99.9 99.9 99.9 99.9 100.0 100.0 100.0 87.0 95.9 99.8 CR 300 91.3 96.4 98.1 99.0 99.4 99.8 99.9 99.9 99.9 99.9 100.0 100.0 100.0 GE 200 87.0 91.3 95.9 96.4 98.1 99.0 99.4 99.8 99.8 99.9 99.9 99.9 99.9 100.0 100.0 100.0 GE 100 87.0 95.9 98.1 99.0 99.4 99.8 99.9 99.9 99.9 99.9 100.0 100.0 100.0 91.3 96.4 99.8 GE 000 87.0 91.3 95.9 96.4 98.1 99.0 99.4 99.8 99.8 99.9 99.9 99.9 100.0 100.0 100.0

TOTAL NUMBER OF OBSERVATIONS 837

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM BOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTE: AUG HOURS: 21-23

				P9.1.	10 010	: - 1					MUNIU:	AUG	noora:	21-23			
CEIL	ING	• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •		VISIBIL:	ITY IN I	METERS	•••••	• • • • • • •	• • • • • • •	• • • • • • •	•••••	• • • • • •	•••••	• • • • • •
IN		GE	Œ	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	Œ	GE	GE
FEE		112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
	- ,		• • • • • • •														
MO C	EIL	50.8	54.4	55.7	55.7	55.9	55.9	55.9	55.9	55.9	55.9	55.9	55.9	55.9	55.9	56.0	56.0
G18 2	0000	56.2	59.9	61.2	61.4	61.6	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.9	61.9
CE 1	8000	56.2	59.9	61.2	61.4	61.6	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.9	61.9
GE 1	6000	56.2	59.9	61.2	61.4	61.6	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.9	61.9
GE 1	4000	56.3	60.0	61.3	61.5	61.8	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	62.0	62.0
GE 1	.2000	56.4	60.1	61.4	61.6	61.9	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.1	62.1
GP 1	.0000	60.6	64.6	66.5	67.1	67.5	67.6	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.9	67.9
	9000	61.3	65.5	67.5	68.1	68.5	68.6	68.7	68.9	68.9	68.9	68.9	68.9	68.9	68.9	69.1	69.1
	8000	63.9	68.5	71.0	71.6	72.0	72.2	72.3	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.6	72.6
	7000	64.6	69.2	71.8	72.4	73.1	73.4	73.5	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.8	73.8
	6000	65.1	69.7	72.3	72.9	73.6	73.8	74.0	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.3	74.3
GD.	0000	03.1	03.7	12.5	16.3	,,,,	73.0	74.0	74.2	74.2	,4.2	74.2	74.2	74.2	74.2	,4.5	,4.3
Œ	5000	68.8	73.5	76.3	76.9	77.7	77.9	78.0	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.4	78.4
GE	4500	72.2	76.8	79.9	80.5	81.5	81.7	81.8	82.1	82.1	82.1	82.1	82.1	82.1	82.1	82.2	82.2
GE	4000	76.1	80.8	84.0	84.6	85.9	86.4	86.6	86.9	86.9	86.9	86.9	86.9	86.9	86.9	87.0	87.0
GE	3500	79.0	84.0	87.7	88.3	89.6	90.2	90.4	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.8	90.8
Œ	3000	80.6	85.8	89.6	90.2	91.8	92.5	92.7	93.1	93.1	93.1	93.1	93.2	93.2	93.2	93.3	93.3
	2500	81.4	86.6	90.8	91.4	93.1	93.8	94.0	94.4	94.4	94.4	94.4	94.5	94.5	94.5	94.6	94.6
	2000	82.1	87.3	91.5	92.1	93.8	94.6	94.9	95.2	95.2	95.2	95.2	95.3	95.3	95.3	95.5	95.5
	1800	82.2	87.5	91.6	92.2	93.9	94.9	95.2	95.6	95.6	95.6	95.6	95.7	95.7	95.7	95.8	95.8
	1500	82.7	87.9	92.1	92.7	94.4	95.3	95.7	96.2	96.2	96.2	96.2	96.3	96.3	96.3	96.4	96.4
GE	1200	83.2	88.4	92.6	93.2	94.9	95.9	96.3	96.9	96.9	96.9	96.9	97.0	97.0	97.0	97.1	97.1
Œ	1000	83.5	88.8	93.2	93.8	95.5	96.7	97.0	97.6	97.6	97.6	97.6	97.7	97.7	97.7	97.8	97.8
GE	900	83.6	88.9	93.3	93.9	95.6	96.8	97.1	97.7	97.7	97.7	97.7	97.8	97.8	97.8	98.0	98.0
GE	800	83.8	89.0	93.4	94.1	95.8	97.0	97.4	98.0	98.0	98.0	98.0	98.1	98.1	98.1	98.2	98.2
Œ	700	84.0	89.2	93.8	94.5	96.2	97.4	97.7	98.4	98.4	98.4	98.4	98.6	98.6	98.6	9 8.7	98.7
GE	600	84.0	89.2	93.9	94.6	96.3	97.5	98.0	98.7	98.7	98.7	98.7	98.8	98.8	98.8	98.9	98.9
GE	500	84.0	89.2	93.9	94.9	96.7	97.8	98.4	99.3	99.3	99.3	99.3	99.4	99.4	99.4	99.5	99.5
GE GE	400	84.0	89.2	93.9	94.9	96.9	98.1	98.7	99.5	99.5	99.5	99.5	99.6	99.6	99.6	99.8	99.8
GE	300	84.0	89.2	93.9	94.9	96.9	98.1	98.7	99.5	99.5	99.5	99.8	99.0	99.9	99.0	100.0	100.0
CIE	200	84.0	89.2	93.9	94.9	96.9	98.1	98.7	99.5	99.5	99.8	99.8	99.9	99.9	99.9	100.0	100.0
CE	100	84.0															
UE	100	64.0	89.2	93.9	94.9	96.9	98.1	98.7	99.5	99.5	99.8	99.8	99.9	99.9	99.9	100.0	100.0
GE	000	84.0	89.2	93.9	94.9	96.9	98.1	98.7	99.5	99.5	99.8	99.8	99.9	99.9	99.9	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 837

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: AUG HOURS: ALL CEILING VISIBILITY IN METERS Œ IN GR Œ GE CIR. GR GE GE GR GR Œ GE Œ GE GE GE FEET 112 90 80 60 48 40 32 24 20 16 12 10 80 06 04 00 NO CEIL 36.7 38.4 41.7 42.1 43.3 43.6 44.0 44.3 44.4 44.7 44.8 44.9 44.9 45.0 45.1 45.2 GE 20000 42.3 47.8 49.7 50.0 50.4 50.7 50.8 51.1 51.2 51.3 51.7 44.3 48.4 51.3 51.4 51.5 GR 18000 50.4 42.3 44.3 47.8 48.4 49.7 50.0 50.7 50.8 51.1 51.2 51.3 51.4 51.4 51.6 51.7 50.4 GE 16000 42.3 44.3 47.8 48.4 49.7 50.0 50.7 50.8 51.1 51.2 51.3 51.4 51.4 51.6 51.7 GR 14000 50.7 48.2 48.8 50.0 50.4 51.0 51.2 51.5 51.6 51.7 51.7 42.7 44.6 51.8 51.9 52.0 52.4 GE 12000 43.1 45.2 48.8 49.4 50.7 51.0 51.4 51.7 51.8 52.1 52.2 52.3 52.4 52.6 52.7 **GE 10000** 45.9 48.2 52.3 53.0 54.6 55.0 55.4 55.7 55.9 56.2 56.3 56.4 56.4 56.5 56.6 56.8 GE 9000 46.7 49.0 53.3 54.0 55.6 56.1 56.5 56.8 57.0 57.3 57.4 57.5 57.5 57.6 57.7 57.9 61.3 8000 60.0 60.5 60.8 61.4 61.5 GR 49.9 52.4 57.0 57.9 59.5 61.0 61.5 61.6 61.7 61.9 GE 7000 50.6 53.2 57.9 58.8 60.4 61.0 61.5 62.0 62.2 62.5 62.6 62.7 62.7 62.8 63.0 63.1 6000 62.3 GE 50.9 53.5 58.2 60.8 61.4 61.9 62.5 62.8 62.9 63.0 63.1 63.2 59.1 63.3 63.5 GE 5000 53.4 56.0 61.0 61.9 63.6 64.2 64.8 65.2 65.4 65.7 65.8 65.9 66.0 66.1 66.2 66.4 4500 59.1 64.3 67.0 67.6 68.1 68.6 68.8 69.1 69.3 69.4 69.5 69.7 69.8 GE 56.3 65.2 69.4 4000 60.8 63.8 69.5 70.5 72.3 73.7 74.2 74.4 74.7 74.9 74.9 75.0 75.2 75.3 75.4 GE 73.0 GE 3500 67.7 77.1 78.6 79.2 79.5 79.9 80.0 80.2 80.4 64.4 73.9 75.0 77.9 80.1 80.5 80.7 GR 3000 67.9 71.4 78.2 79.4 81.7 82.6 83.5 84.2 84.5 85.0 85.1 85.2 85.3 85.5 85.7 85.8 GE 2500 72.7 79.6 85.1 85.9 86.2 87.0 69.1 80.9 83.3 84.2 86.6 86.8 86.9 87.2 87.4 87.5 GE 2000 70.9 74.6 81.9 83.2 85.7 86.8 87.7 88.5 88.8 89.2 89.4 89.5 89.6 89.8 90.0 90.1 GE 1800 71.2 75.0 83.6 87.2 88.2 89.0 89.3 89.7 89.9 90.0 90.1 90.3 90.7 82.3 86.1 90.5 1500 GE 76.2 83.7 85.1 87.7 89.9 90.7 91.0 91.5 91.7 91.9 92.4 72.4 88.9 91.8 92.0 92.2 GE 1200 73.4 77.3 85.0 86.5 89.2 90.4 91.5 92.3 92.7 93.2 93.4 93.5 93.6 93.7 94.0 94.1 GE. 1000 73.9 77.8 85.7 87.2 89.9 91.3 92.4 93.2 93.6 94.1 94.3 94.4 94.5 94.7 94.9 95.1 GE 900 74.1 78.1 86.1 87.6 90.4 91.8 92.9 93.8 94.2 94.7 94.8 95.0 95.1 95.3 95.5 95.6 95.1 95.3 95.5 800 74.3 78.3 86.4 94.2 GE 88.0 90.8 92.1 93.3 94.6 95.4 95.7 95.9 96.1 Œ 700 74.6 78.5 86.8 94.8 95.2 95.7 95.9 88.4 91.3 92.7 93.8 96.0 96.2 96.3 96.6 96.7 Œ 74.7 78.6 600 87.1 88.7 91.7 93.1 94.3 95.3 95.7 96.2 96.4 96.5 96.7 96.9 97.1 97.3 GE 500 74.8 78.7 87.2 88.9 92.1 93.5 94.7 95.8 96.3 96.9 97.1 97.2 97.5 97.6 97.8 98.0 95.0 GE 400 74.8 78.8 87.3 89.0 96.7 97.3 97.5 97.9 92.3 93.7 96.1 97.6 98.0 98.3 98.5 GE 300 74.8 73.8 87.4 89.0 $\delta x \to$ 93.8 95.1 96.3 96.9 97.6 97.8 97.9 98.2 98.4 98.8 98.6 GE 200 74.8 78.8 87.4 89.0 93.8 96.9 97.6 97.9 98.4 95.1 96.3 98.1 98.6 98.9 99.2 94.4 Œ 100 74.8 78.8 87.4 89.0 93.8 95.1 96.4 97.0 97.7 98.0 98.1 98.5 98.7 99.2 99.9 GE 000 74.8 78.8 87.4 89.0 92.4 93.8 95.1 96.4 97.0 97.7 98.0 98.1 98.5 98.8 99.2 100.0

TOTAL NUMBER OF OBSERVATIONS 6696

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: SEP HOURS: 00-02

				LST	TO UTC	: - 1					MONTH:	SEP	HOURS:	00-02			
CRI	CEILING VISIBILITY IN METERS															•••••	
I		GE	Œ	GE	GE	GE	GE	GE	GE	GE	GE	GE	Œ	GE	GE	GE	GE
FE		112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
•••	•••••			• • • • • • •						• • • • • •							
NO	CEIL	36.7	37.0	43.1	44.2	46.4	46.8	47.7	48.1	48.9	50.1	50.4	50.5	50.6	51.2	51.2	51.4
æ	20000	40.6	41.2	47.9	49.4	51.9	52.2	53.1	53.6	54.6	55.9	56.3	56.4	56.5	57.2	57.2	57.3
	18000	40.6	41.2	47.9	49.4	51.9	52.2	53.1	53.6	54.6	55.9	56.3	56.4	56.5	57.2	57.2	57.3
	16000	40.6	41.2	47.9	49.4	51.9	52.2	53.1	53.6	54.6	55.9	56.3	56.4	56.5	57.2	57.2	57.3
	14000	41.2	41.9	48.5	50.0	52.5	52.8	53.7	54.2	55.2	56.5	56.9	57.0	57.2	57.8	57.8	57.9
	12000	41.6	42.2	48.9	50.4	52.8	53.2	54.1	54.6	55.6	56.9	57.3	57.4	57.5	58.1	58.1	58.3
	i																
GE	10000	44.3	44.9	52.5	54.1	56.7	57.2	58.3	58.8	59.8	61.1	61.5	61.6	61.7	62.3	62.3	62.5
Œ	9000	45.6	46.2	54.0	55.6	58.1	58.6	59.8	60.2	61.2	62.6	63.0	63.1	63.2	63.8	63.8	64.0
GE	8000	48.5	49.3	57.2	59.0	62.0	62.5	63.7	64.2	65.2	66.5	66.9	67.0	67.2	67.8	67.8	67.9
Œ	7000	48.8	49.5	57.4	59.4	62.3	62.8	64.1	64.6	65.6	66.9	67.3	67.4	67.5	68.1	68.1	68.3
Œ	6000	48.8	49.5	57.4	59.4	62.3	62.8	64.1	64.6	65.6	66.9	67.3	67.4	67.5	68.1	68.1	68.3
_		50 4		50 ·						67.0				<i>c</i> o	50.0	<i></i> -	70.0
Œ	5000	50.4	51.2	59.1	61.1	64.1	64.6	65.8	66.3	67.3	68.6	69.0	69.1	69.3	69.9	69.9	70.0
GE GE	4500 4000	52.8 55.8	53.8	61.7	63.7	66.7	67.2	68.4	68.9	69.9	71.2	71.6	71.7	71.9 75.1	72.5	72.5	72.6
GE GE	3500	57.8	56.8 58.9	64.9 67.5	66.9 69.5	69.9 72.5	70.4 73.0	71.6 74.2	72.1 74.7	73.1 75.7	74.4 77.0	74.8 77.4	74.9 77.5	77.7	75.7 78.3	75.7 78.3	75.8 78.4
GE	3000	60.4	61.5	70.2	72.5	75.8	76.3	77.5	78.0	79.0	80.4	80.7	80.9	81.0	81.6	81.6	81.7
GE	3000	00.4	61.5	70.2	14.5	/3.0	70.3	77.5	78.0	79.0	60.4	80.7	00.9	81.0	01.0	61.6	01.7
Œ	2500	61.9	63.1	72.0	74.2	77.5	78.0	79.4	79.9	80.9	82.2	82.6	82.7	82.8	83.5	83.5	83.6
GE	2000	64.4	65.9	75.2	77.4	80.9	81.4	83.0	83.5	84.4	85.8	86.2	86.3	86.4	87.0	87.0	87.2
GE	1800	64.9	66.4	75.8	78.0	81.6	82.1	83.7	84.2	85.2	86.5	86.9	87.0	87.2	87.8	87.8	87.9
GB	1500	66.2	67.8	77.2	79.4	83.1	83.6	85.4	85.9	86.9	88.4	88.8	88.9	89.0	89.6	89.6	89.8
Œ	1200	68.3	69.9	79.5	81.7	85.7	86.2	88.0	88.5	89.5	91.0	91.4	91.5	91.6	92.2	92.2	92.3
Œ	1000 900	69.4 70.4	71.0	80.7	83.0	86.9	87.4	89.3	89.8	90.7	92.2	92.6	92.7	92.8	93.5	93.5	93.6
GE GE	800	71.1	72.0 72.8	81.9 82.7	84.1 84.9	88.0 88.9	88.5 89.4	90.4 91.2	90.9 91.7	92.0 92.8	93.5 94.3	93.8 94.7	94.0 94.8	94.1 94.9	94.7 95.6	94.7 95.6	94.8 95.7
GE	700	71.5	73.3	83.3	85.7	89.6	90.1	92.1	92.6	93.7	95.2	95.6	95.7	95.8	96.4	96.4	96.5
GE	600	71.7	73.6	83.6	85.9	90.0	90.5	92.5	93.1	94.2	95.7	96.0	96.2	96.3	96.9	97.0	97.2
40	000	/1./	73.0	03.0	63.9	30.0	90.5	32.3	93.1	34.2	93.7	30.0	90.2	30.3	30.3	37.0	31.2
Œ	500	72.1	74.0	84.1	86.4	90.6	91.1	93.1	93.7	94.8	96.3	96.7	96.8	96.9	97.5	97.7	97.8
Œ	400	72.1	74.0	84.1	86.4	90.6	91.1	93.1	93.7	94.8	96.3	96.7	96.8	96.9	97.5	97.7	97.8
Œ	300	72.1	74.0	84.1	86.4	90.6	91.1	93.1	93.7	94.8	96.3	96.7	96.8	96.9	97.5	97.7	97.8
GE	200	72.1	74.0	84.1	86.4	90.6	91.1	93.2	93.8	95.1	96.5	96.9	97.0	97.5	98.1	98.3	98.4
Œ	100	72.1	74.0	84.1	86.4	90.6	91.1	93.2	93.8	95.2	96.8	97.2	97.3	97.9	98.5	98.6	99.5
Œ	000	72.1	74.0	84.1	86.4	90.6	91.1	93.2	93.8	95.2	96.8	97.2	97.3	98.1	98.8	99.0	100.0
• • •	• • • • • •		• • • • • • •			• • • • • • •		• • • • • • •									

TOTAL NUMBER OF OBSERVATIONS 810

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STA	TION :	NUMBER:	106070				INDAHLEM	AB/GER	MANY					AN 80 -	DEC 89		
					TO UTC:	-					MONTH:		HOURS:	03-05			
	LING	• • • • • • •		•••••	• • • • • • •		VISIBIL			• • • • • • •	• • • • • • •	• • • • • •		• • • • • • •	• • • • • • •	•••••	•••••
	N	GE	GE	GE	GE	GR	GE	GE	GE	Œ	GE	GE	GE	Œ	GE	GE	GE
FE	ET	112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
									• • • • • •						• • • • • • •		•••••
		1															
NO	CEIL	29.3	29.8	35.3	37.1	39.6	40.5	41.8	43.1	44.3	45.3	45.6	46.0	46.4	46.9	47.4	48.2
GE	20000	32.1	32.8	38.9	40.7	43.4	44.4	45.8	47.0	48.2	49.2	49.6	49.9	50.6	51.2	51.7	52.6
Œ	18000	32.1	32.8	38.9	40.7	43.4	44.4	45.8	47.0	48.2	49.2	49.6	49.9	50.6	51.2	51.7	52.6
	16000	32.1	32.8	38.9	40.7	43.4	44.4	45.8	47.0	48.2	49.2	49.6	49.9	50.6	51.2	51.7	52.6
GE	14000	32.5	33.1	39.3	41.1	43.8	44.8	46.1	47.4	48.6	49.6	49.9	50.3	50.9	51.5	52.0	53.0
GE	12000	33.0	33.7	40.2	42.1	44.8	45.8	47.1	48.3	49.6	50.6	50.9	51.3	51.9	52.5	53.0	54.0
GE	10000	34.1	34.8	41.3	43.2	45.9	46.9	48.3	49.8	51.0	52.3	52.6	53.0	53.7	54.4	54.8	55.8
GE	9000	35.7	36.4	43.1	44.9	47.7	48.7	50.2	51.7	52.9	54.1	54.5	54.8	55.6	56.2	56.7	57.8
GE	8000	37.7	38.4	45.4	47.4	50.2	51.2	52.6	54.1	55.3	56.6	56.9	57.3	58.0	58.7	59.1	60.2
GE	7000	37.9	38.7	45.6	47.6	50.4	51.4	52.9	54.4	55.6	56.8	57.3	57.7	58.4	59.0	59.5	60.6
Œ	6000	37.9	38.7	45.6	47.6	50.4	51.4	52.9	54.4	55.6	56.8	57.3	57.7	58.4	59.0	59.5	60.6
GE	5000	38.7	39.6	46.6	48.6	51.4	52.4	53.9	55.3	56.6	58.0	58.5	58.9	59.6	60.2	60.7	61.8
GE	4500	40.5	41.5	49.2	51.2	54.1	55.2	56.9	58.4	59.6	61.1	61.6	62.0	62.7	63.3	63.8	64.9
GE	4000	43.1	44.2	52.6	54.6	57.7	58.8	60.5	62.0	63.2	64.8	65.3	65.6	66.4	67.0	67.5	68.6
GE	3500	44.9	46.0	54.8	56.8	59.9	61.0	62.7	64.2	65.4	67.0	67.5	67.9	68.6	69.2	69.7	70.8
ge	3000	48.1	49.3	58.9	60.9	63.9	65.2	66.9	68.5	69.7	71.3	71.8	72.1	72.9	73.5	74.0	75.1
		١															
GE	2500		50.7	60.2	62.3	65.4	66.9	68.6	70.2	71.4	73.0	73.5	73.9	74.6	75.2	75.7	76.8
GE	2000 1800	51.3 52.6	52.5	62.1	64.2	67.4	68.8	70.8	72.4	73.7	75.3	75.8	76.3	77.1	77.7	78.2	79.3
GE	1500	54.1	53.9 55.6	63.4 65.4	65 . 5 67 . 5	68.8 70.9	70.3 72.4	72.3 74.4	73.9 76.0	75.2 77.3	76.8 78.9	77.3 79.4	77.8 79.9	€78.5 80.6	79.1 81.2	79.6 81.7	80.7 82.8
GE	1200	56.3	57.9	67.9	69.9	73.4	74.8	76.9	78.5	79.9	81.5	82.0	82.5	83.2	83.8	84.3	85.4
			3.13	0.13	03.5		.4.0	, 0.5	70.5	,,,,	01.5	02.0	02.5	03.2	03.0	04.5	03.4
GE	1000	57.8	59.6	69.9	72.3	76.0	77.4	79.6	81.2	82.7	84.3	84.8	85.3	86.0	86.6	87.1	88.2
GE	900	58.9	60.7	71.4	73.7	77.4	79.0	81.2	82.8	84.3	85.9	86.4	86.9	87.6	88.2	88.7	89.8
GE	800	59.1	61.1	72.1	74.5	78.3	79.9	82.1	83.7	85.2	86.7	87.2	87.7	88.5	89.1	89.6	90.7
GE	700	59.3	61.3	72.5	74.8	78.7	80.2	82.5	84.0	85.5	87.1	87.6	88.1	88.8	89.4	89.9	91.0
GE	600	60.0	62.2	73.5	76.2	80.4	82.0	84.2	85.8	87.2	88.8	89.3	89.9	90.7	91.3	91.8	92.9
GE	500	60.7	62.9	74.6	77.3	81.5	83.1	85.4	87.2	88.7	90.3	90.8	91.4	92.1	92.9	93.5	94.6
GE	400	60.7	62.9	74.6	77.3	81.5	83.1	85.4	87.2	88.7	90.3	90.8	91.4	92.1	92.9	93.5	94.6
GE	300	60.7	62.9	74.7	77.4	81.6	83.2	85.5	87.4	88.8	90.4	90.9	91.5	92.3	93.1	93.7	94.8
GE	200	60.7	62.9	74.7	77.4	81.6	83.2	85.5	87.4	88.8	90.6	91.0	91.7	92.6	93.7	94.7	96.2
GE	100	60.7	62.9	74.7	77.4	81.6	83.3	85.6	87.5	89.0	90.7	91.2	92.0	93.0	94.2	96.1	98.9
GE	000	60.7	62.9	74.7	77.4	81.6	83.3	85.6	87.5	89.0	90.7	91.2	92.0	93.1	94.6	96.8	100.0

TOTAL NUMBER OF OBSERVATIONS 815

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 STATION NUMBER: 106070 MONTH: SEP HOURS: 06-08 LST TO UTC: - 1 VISIBILITY IN METERS CRILING GE GR. GE Œ Œ GE Œ TH **GR** GR GR Œ GR GE GR Œ GR FEET 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 15.8 16.0 25.8 27.0 31.7 32.8 33.8 35.5 36.9 37.8 38.5 39.2 39.9 40.2 40.8 GE 20000 17.9 18.2 28.6 29.8 34.9 36.1 37.1 38.8 40.5 41.3 42.3 43.0 43.6 44.1 44.8 46.9 GE 18000 17.9 18.2 28.6 29.8 36.1 37.1 38.8 40.5 41.3 42.3 43.0 43.6 44.1 46.9 34.9 44.8 GE 16000 17.9 18.2 28.6 29.8 34.9 36.1 37.1 38.8 40.5 41.3 42.3 43.0 43.6 44.1 44.8 46.9 GE 14000 18.0 18.3 28.8 30.0 35.1 36.3 37.3 39.0 40.7 41.6 42.5 43.3 43.9 44.3 45.1 47.1 GR 12000 18.5 29.2 30.4 36.8 41.4 18.2 35.5 37.9 39.7 42.3 43.3 44.0 44.6 45.1 45.8 47.9 GE 10000 19.7 30.6 37.3 39.7 41.6 44.2 19.3 31.8 38.6 43.3 45.3 46.1 46.7 47.1 47.9 50.2 GE 9000 32.7 44.5 20.0 20.4 31.5 38.2 39.5 40.6 42.5 45.4 46.7 47.4 48.0 48.5 49.2 51.6 Œ 8000 21.3 21.6 32.8 34.4 40.3 42.0 43.3 45.2 47.1 48.2 49.5 50.3 50.9 51.4 52.1 54.6 7000 48.6 Œ 21.9 33.0 45.6 47.5 49.8 50.7 21.5 34.6 40.6 42.3 43.6 51.3 51.8 52.5 54.9 Œ 6000 21.6 22.0 33.2 34.8 40.7 42.4 43.7 45.7 47.6 48.7 49.9 50.8 51.4 51.9 52.7 55.2 GE 5000 22.1 22.5 33.7 35.5 41.4 43.3 44.6 46.5 48.6 49.7 50.9 51.8 52.4 52.9 53.7 56.1 Œ 4500 23.5 23.8 35.2 37.1 43.1 45.0 46.3 49.0 51.0 52.1 53.3 54.2 54.8 55.3 56.1 58.5 39.1 56.9 54.8 Œ 4000 24.7 25.4 37.3 45.8 47.6 49.0 51.6 53.7 56.0 57.5 58.0 58.8 61.4 Œ 3500 26.4 27.2 39.4 41.2 47.9 49.7 51.0 53.7 55.8 56.9 58.1 58.9 59.5 60.0 60.9 63.4 44.8 57.7 59.9 63.3 63.9 3000 53.7 61.2 64.4 Œ 29.4 30.4 43.0 51.9 55.0 62.5 65.4 67.9 Œ 2500 30.3 31.3 44.3 46.2 53.2 55.0 56.6 59.3 61.5 62.8 64.0 64.9 65.5 66.0 67.0 69.5 65.2 68.9 Œ 2000 32.3 33.4 47.1 49.1 56.3 58.2 59.8 62.6 66.7 68.0 69.5 70.1 71.1 73.6 Œ 1800 34.0 35.4 49.5 51.4 58.6 60.5 62.1 65.0 67.7 69.1 70.5 71.3 71.9 72.5 73.5 76.1 1500 63.2 70.5 72.1 Œ 36.0 37.7 52.0 53.9 61.2 64.9 67.8 73.4 74.2 74.8 75.5 76.5 79.1 Œ 1200 37.3 39.0 53.6 55.7 62.9 65.1 66.8 69.9 72.5 74.1 75.5 76.3 76.9 77.5 78.6 81.2 65.0 79.1 **CR** 1000 40.8 57.6 67.2 68.9 71.9 74.6 76.2 77.6 78.5 79.7 80.9 39.1 55.5 83.5 Œ 900 41.1 42.8 57.6 59.8 67.2 69.4 71.1 74.1 76.8 78.5 80.2 81.0 81.7 82.3 83.5 86.0 58.2 60.4 800 67.8 74.8 77.5 79.5 82.0 87.0 Œ 41.4 43.1 70.0 71.8 81.2 82.6 83.2 84.4 æ 700 42.2 43.9 59.2 61.4 68.8 71.1 72.9 75.9 78.7 80.7 82.4 83.2 83.8 84.4 85.7 88.2 Œ 600 42.6 44.3 59.8 62.3 70.4 72.8 74.6 77.6 80.4 82.4 84.1 84.9 85.5 86.1 87.4 89.9 Œ 500 43.4 45.1 60.8 63.4 71.7 74.2 76.1 79.3 82.3 84.2 86.1 87.0 87.6 88.2 89.4 92.0 Œ 400 45.2 60.9 63.5 74.4 79.6 82.5 84.6 86.5 87.5 88.1 88.7 89.9 92.5 43.5 71.8 76.2 æ 300 43.6 45.3 61.0 63.7 72.1 74.6 76.4 80.1 83.0 85.2 87.1 88.3 89.1 89.8 91.0 93.7 Œ 200 43.6 45.3 61.1 63.8 72.2 74.7 76.8 80.6 83.5 85.7 87.6 89.1 90.0 91.1 92.6 95.7 100 45.3 61.1 63.8 85.7 89.1 90.2 91.4 Œ 43.6 72.2 74.7 76.8 80.6 83.5 87.6 93.1 99.1 Œ 000 43.6 45.3 61.1 63.8 72.2 74.7 76.8 80.6 83.5 85.7 87.6 89.1 90.2 91.5 93.6 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: JAN 80 - DEC 89 STATION NAME: SPANDAHLEM AB/GERMANY STATION NUMBER: 106070 LST TO UTC: - 1 MONTH: SEP HOURS: 09-11 CRITAING VISIBILITY IN METERS IN Œ GE Œ GE Œ GE GE GE Œ GE Œ GE Œ GR GE 112 80 48 32 16 12 FEET 90 60 40 24 20 10 08 06 04 00 NO CEIL 21.6 22.1 28.6 30.4 33.6 35.0 35.4 36.1 36.8 37.5 37.5 37.7 37.8 38.3 38.8 39.2 GE 20000 24.7 25.2 32.2 34.2 38.1 39.5 40.0 40.8 41.6 42.3 42.3 42.5 42.7 43.2 43.6 44.1 GE 18000 24.7 25.2 32.2 34.2 38.1 39.5 40.0 40.8 41.6 42.3 42.4 42.7 42.8 44.2 43.3 43.8 GE 16000 25.2 32.2 39.5 40.0 40.8 41.6 42.3 42.7 42.8 24.7 34.2 38.1 42.4 43.8 44.2 43.3 GE 14000 24.7 25.2 32.2 34.2 38.1 39.5 40.0 40.8 41.6 42.3 42.4 42.7 42.8 43.3 43.8 44.2 GE 12000 25.2 25.7 32.7 34.7 38.5 40.0 40.5 41.3 42.1 42.8 42.9 43.2 43.4 43.9 44.4 44.8 GE 10000 26.3 26.8 34.4 36.4 40.4 41.8 42.5 44.7 45.5 45.8 46.1 46.3 46.8 47.8 GE 9000 26.8 27.3 34.9 37.0 43.2 44.4 45.3 46.1 46.4 46.7 46.9 41.0 42.4 47.4 48.4 47.9 GE 8000 27.5 28.0 36.0 38.1 43.2 44.6 45.5 46.7 47.6 48.4 48.7 49.0 49.3 49.8 50.3 50.8 GE 7000 28.0 28.5 36.5 38.5 45.1 45.9 47.2 48.1 48.8 49.2 49.5 49.8 50.3 51.3 43.6 50.8 GR 6000 28.1 38.7 45.3 49.1 50.1 28.6 36.6 43.9 46.2 47.4 48.4 49.5 49.7 50.5 51.0 51.5 29.8 GR 5000 29.3 37.8 47.6 40.0 45.3 46.8 49.1 50.1 50.8 51.2 51.4 51.8 52.2 52.7 53.2 GE 4500 29.9 30.4 38.5 40.7 46.2 47.6 48.5 49.9 50.9 51.6 52.0 52.2 52.6 53.1 53.6 54.1 GE 4000 32.7 33.3 41.7 44.0 49.8 52.1 54.5 55.3 55.6 55.9 56.2 51.3 53.6 56.7 57.2 57.7 35.2 43.9 GR 3500 34.5 46.2 52.0 53.6 54.4 56.0 57.0 57.7 58.1 58.3 58.7 59.2 59.6 60.1 GE 3000 38.2 39.4 48.5 50.9 57.1 58.7 59.5 61.2 62.2 62.9 63.3 63.5 63.9 64.4 64.8 65.3 GE 2500 39.8 41.3 50.4 53.2 59.6 61.2 62.1 63.9 64.8 65.6 65.9 66.2 66.5 67.0 67.5 68.0 GE 2000 43.8 45.5 54.9 57.7 64.1 65.7 66.8 68.7 59.8 70.5 70.9 71.2 71.5 72.0 72.5 73.0 1800 56.4 68.2 70.2 71.3 72.0 GR 45.0 46.8 59.2 65.6 67.2 72.4 72.6 73.0 73.5 73.9 74.4 GE 1500 48.8 51.0 61.0 63.8 70.4 72.0 73.1 75.2 76.2 77.0 77.3 77.6 77.9 78.4 78.9 79.4 1200 52.2 80.6 81.3 GE 54.5 65.0 67.8 74.8 76.4 77.5 79.5 81.7 81.9 82.3 82.8 83.3 83.8 GE 1000 56.7 67.9 70.8 77.9 79.8 81.0 83.0 84.2 85.0 85.3 85.6 85.9 86.4 87.4 54.4 86.9 GR 900 55.3 57.6 69.0 71.9 79.3 81.1 82.3 84.4 85.6 86.3 86.7 86.9 87.3 87.8 88.2 88.7 GE 800 56.1 58.4 69.8 72.7 80.4 82.3 83.5 85.6 86.8 87.5 87.9 88.1 88.5 89.0 89.5 89.9 89.2 89.6 90.3 90.7 84.2 GE 700 56.2 58.5 70.3 73.2 81.0 83.0 86.4 87.9 88.6 89.0 90.1 90.5 91.0 85.1 GE 600 56.4 58.7 70.7 73.6 81.7 83.9 87.5 89.0 89.7 90.1 91.3 91.8 92.2 GR 500 57.0 59.3 72.1 75.4 84.2 86.5 87.9 90.8 92.6 93.3 93.9 94.2 94.5 95.2 95.6 96.1 GE 400 57.0 59.5 72.4 75.6 84.7 87.0 88.4 91.3 93.2 94.1 94.7 94.9 95.3 95.9 96.4 96.8 300 57.0 59.5 75.6 91.9 93.9 95.5 95.8 96.8 97.5 GR 72.4 84.7 87.2 88.8 94.9 96.2 97.9 CE 200 57.0 59.5 72.4 75.6 84.7 87.2 88:8 91.9 93.9 95.2 95.9 96.1 96.8 97.5 98.2 98.8 GR 100 57.0 59.5 72.4 75.6 87.2 88.8 91.9 93.9 95.2 95.9 96.2 97.0 84.7 97.6 98.4 99.3 000 57.0 59.5 72.4 75.6 84.7 87.2 88.8 91.9 93.9 95.2 96.0 96.4 97.1 97.9 99.0 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: SEP HOURS: 12-14

				LST	TO UTC	: - 1					MONTH:	SEP	HOURS:	12-14			
CEI	LING	• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	•••••	visibil	ITY IN	METERS	• • • • • •	•••••	•••••	• • • • • •		•••••	•••••	•••••
1	n j	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE
FE	et	112	90	80	60	48	40	32	24	20	16	12	10	80	06	04	00
•••	•••••		• • • • • • •	•••••	• • • • • • •	•••••	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	•••••	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	•••••
NO	CEIL	30.7	31.6	38.3	39.9	40.6	40.6	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8
GE	20000	35.2	36.2	42.9	44.5	45.3	45.3	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6
Œ	18000	35.2	36.2	42.9	44.5	45.3	45.3	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6
Œ	16000	35.2	36.2	42.9	44.5	45.3	45.3	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6
Œ	14000	35.3	36.4	43.0	44.6	45.6	45.6	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8	45.8
Œ	12000	35.5	36.6	43.4	45.0	45.9	45.9	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2
Œ	10000	37.7	38.9	46.4	48.1	49.3	49.5	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7
Œ	9000	38.4	39.8	47.4	49.1	50.4	50.5	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8
Œ	8000	40.1	41.5	49.3	51.0	52.5	52.7	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
GE	7000	40.8	42.2	50.2	51.9	53.3	53.6	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8
Œ	6000	40.8	42.2	50.2	51.9	53.3	53.6	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8
GE	5000	42.4	43.9	52.2	53.9	55.5	55.8	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
Œ	4500	42.7	44.1	52.5	54.3	56.0	56.2	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6
Œ	4000	46.3	48.0	56.4	58.2	59.9	60.1	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5
Œ	3500	51.5	53.6	61.9	63.9	65.9	66.2	66.5	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7
Œ	3000	58.1	60.8	69.9	72.2	74.7	74.9	75.3	75.5	75.5	75.5	75.6	75.6	75.6	75.6	75.6	75.6
Œ	2500	61.0	63.9	73.5	75.9	78.4	78.7	79.0	79.3	79.3	79.3	79.4	79.4	79.4	79.4	79.4	79.4
Œ	2000	65.0	68.1	77.8	80.2	82.9	83.2	83.5	83.8	83.8	83.8	83.9	83.9	83.9	83.9	83.9	83.9
Œ	1800	66.8	70.1	80.0	82.4	85.2	85.5	85.8	86.1	86.1	86.1	86.2	86.2	86.2	86.2	86.2	86.2
GE	1500	68.8	72.1	82.3	84.7	87.9	88.1	88.5	88.7	88.7	88.7	88.8	88.8	88.8	88.8	88.8	88.8
Œ	1200	70.5	73.8	84.7	87.2	90.5	90.9	91.3	91.5	91.5	91.5	91.6	91.6	91.6	91.6	91.6	91.6
Œ	1000	72.0	75.3	86.7	89.1	92.6	93.0	93.3	93.6	93.6	93.6	93.7	93.7	93.7	93.7	93.7	93.7
Œ	900	72.8	76.1	87.8	90.4	93.9	94.3	94.7	95.0	95.0	95.0	95.2	95.2	95.2	95.2	95.2	95.2
GE	800	73.2	76.5	88.2	90.9	94.5	95.0	95.4	95.8	95.8	95.8	95.9	95.9	95.9	95.9	95.9	95.9
Œ	700	73.6	76.8	89.3	92.1	95.9	96.4	96.7	97.1	97.1	97.1	97.2	97.2	97.2	97.2	97.2	97.2
ÇE	600	73.9	77.3	90.3	93.2	97.1	97.8	98.2	98.7	98.7	98.8	98.9	98.9	98.9	98.9	98.9	98.9
Œ	500	74.2	77.6	90.7	93.6	97.7	98.4	98.8	99.3	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6
Œ	400	74.2	77.6	90.7	93.6	97.7	98.4	98.8	99.3	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6
CE	300	74.2	77.6	90.9	93.8	98.1	98.8	99.2	99.6	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0
GE	200	74.2	77.6	90.9	93.8	98.1	98.8	99.2	99.6	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0
CE	100	74.2	77.6	90.9	93.8	98.1	98.8	99.2	99.6	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0
Œ	000	74.2	77.6	90.9	93.8	98.1	98.8	99.2	99.6	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0
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TOTAL NUMBER OF OBSERVATIONS 825

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: SEP HOURS: 15-17

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	LING '			_				TY IN I			~-					_	
I		Œ	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE
FE	ET	112	90	80	60	48	40	32	24	20	16	12	10	80	06	04	00
• • •	•••••	•••••	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •
NO	CEIL	39.2	40.4	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
	20000	45.9	47.4	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8
	18000	45.9	47.4	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8
	16000	46.0	47.5	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9
	14000	46.0	47.5	51.9	52.0	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1
GE	12000	47.1	48.6	53.2	53.3	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5
	. 																
	10000	49.5	51.0	55.9	56.0	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2
GE	9000	50.8	52.4	57.2	57.4	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5
GE	8000	54.1	55.7	61.4	61.8	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1
GE	7000	54.7	56.3	62.1	62.5	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9
GE	6000	54.9	56.6	62.5	62.9	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
GE	5000	56.9	58.8	64.9	65.3	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7
GE	4500	57.9	59.9	66.5	66.9	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2
GE	4000	61.1	63.6	70.9	71.3	71.7	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9
GE	3500	66.0	68.9	76.2	76.7	77.3	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5
GE	3000	72.5	75.4	83.3	83.8	84.5	84.7	84.7	84.7	84.7	84.7	84.9	84.9	84.9	84.9	84.9	84.9
GE	2500	74.7	78.0	86.0	86.5	87.3	87.5	87.5	87.5	87.5	87.5	87.7	87.7	87.7	87.7	87.7	87.7
GE	2000	75.9	79.3	87.3	87.8	88.9	89.0	89.0	89.2	89.2	89.2	89.4	89.4	89.4	89.4	89.4	89.4
GE	1800	76.9	80.3	88.3	88.8	90.0	90.1	90.1	90.3	90.3	90.3	90.5	90.5	90.5	90.5	90.5	90.5
GE	1500	78.3	81.7	90.0	90.5	91.7	91.8	91.8	92.0	92.0	92.0	92.3	92.3	92.3	92.3	92.3	92.3
GE	1200	80.0	83.7	92.2	92.7	94.0	94.2	94.2	94.3	94.3	94.3	94.6	94.6	94.6	94.6	94.6	94.6
GE	1000	80.3	83.9	92.8	93.4	94.9	95.0	95.0	95.1	95.1	95.1	95.5	95.5	95.5	95.5	95.5	95.5
GB	900	80.6	84.3	93.4	94.2	95.7	96.0	96.0	96.1	96.1	96.1	96.5	96.5	96.5	96.5	96.5	96.5
GE	800	80.6	84.3	93.5	94.3	95.9	96.1	96.2	96.3	96.3	96.3	96.7	96.7	96.7	96.7	96.7	96.7
GE	700	80.9	84.7	93.9	94.6	96.5	96.7	96.8	97.0	97.1	97.1	97.4	97.4	97.4	97.4	97.4	97.4
GE	600	81.1	84.9	94.3	95.1	97.1	97.3	97.4	97.6	97.7	9 7.7	98.2	98.2	98.2	98.2	98.2	98.2
GE	500	81.2	85.0	94.5	95.5	97.8	98.1	98.3	98.7	98.8	98.9	99.4	99.4	99.4	99.4	99.4	99.4
GE	400	81.2	85.0	94.5	95.5	97.9	98.2	98.4	98.9	99.0	99.1	99.6	99.6	99.6	99.6	99.6	99.6
GE	300	81.2	85.0	94.5	95.6	98.2	98.4	98.8	99.3	99.4	99.5	100.0	100.0	100.0	100.0	100.0	100.0
GE	200	81.2	85.0	94.5	95.6	98.2	98.4	98.8	99.3	99.4	99.5	100.0	100.0	100.0	100.0	100.0	100.0
GE	100	81.2	85.0	94.5	95.6	98.2	98.4	98.8	99.3	99.4	99.5	100.0	100.0	100.0	100.0	100.0	100.0
GE	000	81.2	85.0	94.5	95.6	98.2	98.4	98.8	99.3	99.4	99.5	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 821

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 STATION NUMBER: 106070 MONTH: SEP HOURS: 18-20 LST TO UTC: - 1 CRILING VISIBILITY IN METERS Œ GR GR GR GR GR TN GR Œ GR GE GR GR GE GR GR GR PERT 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 42.6 44.6 48.1 48.1 48.5 48.6 48.6 48.8 48.8 48.8 48.8 48.8 48.8 48.8 48.8 48.8 GE 20000 48.0 50.2 54.8 54.8 55.2 55.3 55.3 55.4 55.6 55.6 55.6 55.6 55.6 55.6 55.6 55.6 GE 18000 48.1 50.4 55.4 55.6 55.7 55.7 55.7 55.7 55.7 55.7 54.9 54.9 55.3 55.4 55.7 55.7 GE 16000 48.1 50.4 54.9 54.9 55.3 55.4 55.4 55.6 55.7 55.7 55.7 55.7 55.7 55.7 55.7 55.7 GE 14000 48.3 50.5 55.1 55.1 55.4 55.6 55.6 55.7 55.8 55.8 55.8 55.8 55.8 55.8 55.8 55.8 GB 12000 49.1 51.4 55.9 55.9 56.3 56.4 56.5 56.7 56.7 56.7 56.7 56.7 56.7 56.4 56.7 56.7 GE 10000 59.6 52.1 54.3 58.9 58.9 59.3 59.4 59.4 59.5 59.6 59.6 59.6 59.6 59.6 59.6 59.6 Œ 9000 | 53.1 55.3 59.9 59.9 60.2 60.4 60.4 60.5 60.6 60.6 60.6 60.6 60.6 60.6 60.6 60.6 Œ 8000 57.4 59.6 65.3 65.7 66.3 66.4 66.4 66.5 66.7 66.7 66.7 66.7 66.7 66.7 66.7 66.7 7000 67.7 67.8 67.8 67.8 Œ 60.5 66.4 66.8 67.4 67.5 67.5 67.8 67.8 67.8 67.8 67.8 58.1 Œ 6000 58.1 60.6 66.7 67.0 67.7 67.8 67.8 67.9 68.0 68.0 68.0 68.0 68.0 68.0 68.0 68.0 æ 5000 60.1 62.8 68.9 69.3 69.9 70.0 70.0 70.1 70.2 70.2 70.2 70.2 70.2 70.2 70.2 70.2 Œ 4500 62.3 65.2 71.5 71.9 72.5 72.6 72.6 72.7 72.8 72.8 72.8 72.8 72.8 72.8 72.8 72.8 Œ 75.9 77.0 4000 65.6 68.8 75.3 76.7 76.8 76.8 76.9 77.0 77.0 77.0 77.0 77.0 77.0 77.0 Œ 3500 69.1 72.7 79.8 80.4 81.2 81.4 81.4 81.5 81.6 81.6 81.6 81.6 81.6 81.6 81.6 81.6 CIR. 72.8 3000 76.4 83.6 84.2 85.2 85.3 85.6 85.7 86.0 86.0 86.0 86.0 86.0 86.0 86.0 86.0 Œ 2500 74.9 78.5 86.0 86.7 87.7 87.8 88.0 88.1 88.5 88.6 88.8 88.8 88.8 88.8 88.8 88.8 **GR** 2000 77.0 80.6 88.1 88.9 89.9 90.0 90.5 90.9 91.0 91.1 91.1 91.1 91.1 91.1 90.2 91.1 Œ 1800 77.4 81.0 88.5 89.3 90.2 90.4 90.6 90.9 91.2 91.4 91.5 91.5 91.5 91.5 91.5 91.5 Œ 1500 78.8 82.3 90.1 90.9 91.9 92.0 92.3 92.6 93.0 93.1 93.2 93.2 93.2 93.2 93.2 93.2 Œ 1200 79.6 83.5 91.6 92.3 93.3 93.5 93.8 94.1 94.4 94.6 94.7 94.7 94.7 94.7 94.7 94.7 Œ 1000 80.0 83.8 92.5 93.2 95.6 95.7 95.8 94.2 94.3 94.7 94.9 95.8 95.8 95.8 95.8 95.8 Œ 900 80.C 83.8 92.5 93.2 94.2 94.3 94.7 94.9 95.6 95.7 95.8 95.8 95.8 95.8 95.8 95.8 Œ 800 80.4 84.2 93.0 93.7 95.1 95.2 95.6 95.8 96.4 96.5 96.7 96.7 96.7 96.7 96.7 96.7 CR 700 80.6 84.4 93.3 94.2 95.6 95.7 96.0 96.3 96.9 97.0 97.2 97.2 97.2 97.2 97.2 97.2 Œ 600 81.2 85.1 94.3 95.3 96.7 96.8 97.2 97.4 98.0 98.1 98.3 98.3 98.3 98.3 98.3 98.3 CR 500 81.5 85.4 94.8 95.9 97.3 97.4 97.8 98.0 98.6 98.8 98.9 98.9 98.9 98.9 98.9 98.9 Œ 400 81.5 85.4 94.8 95.9 97.3 97.4 97.8 98.0 98.6 98.8 98.9 98.9 98.9 98.9 98.9 98.9 CIR. 300 81.7 85.7 95.1 96.2 97.5 97.7 98.3 98.5 99.1 99.3 99.4 99.4 99.5 99.5 99.5 99.5 CE 200 81.7 85.7 95.1 96.2 97.5 97.8 98.4 98.6 99.3 99.4 99.9 99.9 100.0 100.0 100.0 100.0 Œ 85.7 100 81.7 95.1 96.2 97.5 97.8 98.4 98.6 99.3 99.4 99.9 99.9 100.0 100.0 100.0 100.0 Œ 000 81.7 85.7 95.1 96.2 97.5 97.8 98.4 98.6 99.3 99.4 99.9 99.9 100.0 100.0 100.0 100.0

TOTAL NUMBER OF OBSERVATIONS 810

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: SEP HOURS: 21-23 VISIBILITY IN METERS CRILING Œ GR GE GE Œ GE GE GR IN GR GR Œ GR GR GE GE GR FEET 112 90 80 60 48 40 32 24 20 16 12 10 80 06 04 00 NO CEIL 46.0 52.2 52.3 53.0 53.0 53.3 53.3 53.3 53.3 53.3 45.8 50.0 50.9 52.1 53.3 53.3 GE 20000 52.1 52.5 56.7 57.7 58.9 59.0 59.1 59.8 59.8 60.1 60.1 60.1 60.1 60.1 60.1 60.1 **GE 18000** 52.3 52.7 56.9 57.9 59.1 59.3 59.4 60.0 60.0 60.4 60.4 60.4 60.4 60.4 60.4 60.4 60.4 60.4 GR 16000 60.0 60.0 60.4 60.4 60.4 52.3 52.7 56.9 57.9 59.1 59.3 59.4 60.4 60.4 GE 14000 52.7 56.9 57.9 59.1 59.3 59.4 60.0 60.0 60.4 60.4 60.4 60.4 60.4 60.4 60.4 52.3 GE 12000 57.5 59.8 60.0 60.6 60.6 61.0 61.0 61.0 61.0 61.0 61.0 61.0 53.0 53.3 58.5 59.9 GE 10000 55.7 56.0 60.5 61.5 63.0 63.2 63.3 64.0 64.0 64.3 64.3 64.3 64.3 64.3 64.2 GR 9000 56.3 64.2 64.6 64.6 64.6 64.6 64.6 55.9 60.7 61.7 63.2 63.5 63.6 64.6 64.6 GE 8000 59.1 59.6 64.6 65.7 67.3 67.5 67.7 68.3 68.3 68.6 68.6 68.6 68.6 68.6 68.6 68.6 7000 69.0 69.6 70.0 70.0 70.0 70.0 70.0 70.0 70.0 60.7 65.9 67.0 68.6 68.9 69.6 GE 60.2 GR 6000 60.5 61.0 66.2 67.3 68.9 69.1 69.3 69.9 69.9 70.2 70.2 70.2 70.2 70.2 70.2 70.2 70.2 71.2 GR 5000 70.6 71.2 71.6 71.6 71.6 71.6 71.5 71.6 71.6 61.9 62.3 67.5 68.6 70.5 GE 4500 63.7 64.3 69.6 70.7 72.3 72.6 72.7 73.3 73.3 73.7 73.7 73.7 73.7 73.7 73.7 73.7 76.8 77.2 77.2 77.2 77.2 GE 4000 66.7 67.7 74.2 75.8 76.0 76.2 76.8 77.2 77.2 77.2 73.1 GR 3500 69.9 70.9 76.3 77.5 79.1 79.4 79.5 80.1 80.1 80.5 80.5 80.5 80.5 80.5 80.5 80.5 3000 72.7 73.7 79.5 80.7 82.6 82.8 83.0 83.6 83.6 84.0 84.0 84.0 84.0 84.0 84.0 84.0 85.6 GE 2500 73.6 74.7 80.7 82.1 84.0 84.3 84.4 85.2 85.2 85.6 85.6 85.6 85.6 85.6 85.6 GE 2000 77.2 78.3 84.6 85.9 88.0 88.4 88.5 89.5 89.5 89.9 89.9 89.9 89.9 89.9 89.9 89.9 79.4 89.1 90.6 91.0 GR 1800 85.7 90.6 91.0 91.0 91.0 91.0 91.0 78.3 87.0 89.5 89.6 91.0 GE 1500 79.9 81.0 87.3 88.6 90.9 91.2 91.5 92.5 92.5 92.8 92.8 92.8 92.8 92.8 92.8 92.8 93.8 1200 80.9 82.0 89.8 92.2 93.8 94.2 94.2 94.2 94.2 94.2 GE 88.4 92.6 92.8 94.2 94.2 GE 1000 81.6 82.8 89.5 90.9 93.3 93.7 94.1 95.1 95.1 95.4 95.4 95.4 95.4 95.4 95.4 95.4 96.2 95.8 95.8 GE 900 82.0 83.2 90.2 91.6 94.1 94.4 94.8 96.2 96.2 96.2 96.2 96.2 96.2 GE 800 82.2 83.5 90.5 91.9 94.3 94.7 95.1 96.0 96.0 96.4 96.4 96.4 96.4 96.4 96.4 96.4 GR 700 82.3 83.6 90.7 92.1 94.6 95.3 96.3 96.3 96.7 96.7 96.7 96.7 96.7 96.7 96.7 94.9 97.2 GE 600 82.6 83.8 91.0 92.5 94.9 95.3 95.7 96.7 96.8 97.2 97.2 97.2 97.2 97.2 97.2 95.4 97.3 97.8 GE 500 82.6 83.8 91.0 92.5 95.8 96.2 97.2 97.7 97.8 97.8 97.8 97.8 97.8 GE 400 83.1 84.3 91.5 93.0 95.9 96.3 96.7 97.7 97.8 98.3 98.4 98.4 98.4 98.4 98.4 98.4 84.3 91.5 95.9 96.3 97.7 97.8 98.5 98.5 GR 300 83.1 93.0 96.7 98.4 98.5 98.5 98.5 98.5 GR 200 83.1 84.3 91.5 93.0 95.9 96.4 96.8 97.8 98.0 98.6 98.8 98.9 99.0 99.0 99.1 99.1 Œ 100 83.1 84.3 91.5 93.0 95.9 97.8 98.0 98.6 98.9 99.0 99.3 96.4 96.8 99.8 100.0 100.0 000 83.1 84.3 91.5 93.0 95.9 96.4 96.8 97.8 98.0 98.6 98.9 99.0 99.3 99.8 100.0 100.0

TOTAL NUMBER OF OBSERVATIONS 810

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: SEP HOURS: ALL CRILING VISIBILITY IN METERS IN GR GE GB GE ge ge Œ GE GE GE GR GR GE GR GE 90 PEET 112 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 32.7 33.4 39.2 40.2 42.1 42.6 43.1 43.7 44.2 44.7 44.9 45.1 45.2 45.5 45.7 46.1 47.4 47.9 **CER 20000** 37.0 37.9 44.2 45.3 48.4 49.0 49.5 50.2 50.4 50.6 50.8 51.0 51.2 51.7 GE 18000 37.1 38.0 44.2 45.3 47.4 48.0 48.5 49.1 49.7 50.2 50.5 50.6 50.8 51.1 51.3 51.8 GE 16000 47.4 48.0 48.5 49.1 37.1 38.0 44.2 45.4 49.7 50.2 50.5 50.6 50.8 51.1 51.3 51.8 GB 14000 37.2 38.1 44.4 45.6 47.7 48.2 48.7 49.3 49.9 50.5 50.7 50.9 51.1 51.3 51.6 52.0 GR 12000 38.7 45.1 46.2 48.3 48.9 49.4 50.1 50.6 51.2 51.4 51.6 51.8 52.1 52.7 GE 10000 39.8 40.8 47.5 48.7 50.9 51.5 52.1 52.9 53.5 54.1 54.3 54.5 54.7 55.0 55.2 55.7 GE 9000 40.7 41.7 48.5 49.7 52.0 52.6 53.2 53.9 54.6 55.2 55.5 55.6 55.8 56.1 56.3 56.9 Œ 8000 43.1 44.1 51.4 52.8 55.4 56.1 56.7 57.5 58.1 58.7 59.0 59.2 59.4 59.7 59.9 60.4 Œ 7000 43.7 44.7 52.1 53.5 56.1 56.8 57.4 58.1 58.8 59.4 59.7 59.9 60.1 60.4 60.6 61.1 6000 56.9 57.6 58.3 60.3 60.6 GR 43.8 44.8 52.2 53.6 56.2 59.0 39.6 59.9 60.1 60.8 61.3 GE 5000 45.1 46.3 53.8 55.2 57.9 58.6 59.2 60.0 60.7 61.3 61.6 61.8 62.0 62.3 62.5 4500 47.R 55.5 60.4 61.1 62.0 Œ 46.6 57.0 59.7 62.6 63.3 63.6 63.8 64.0 64.3 64.5 65.0 59.0 65.6 67.2 67.7 Œ 4000 49.4 50.9 60.5 63.3 64.0 64.7 66.3 66.9 67.4 67.9 68.2 68.7 Œ 3500 54.1 62.4 64.0 67.6 68.3 69.2 69.9 70.5 70.9 71.1 71.3 71.6 71.8 72.3 52.4 66.9 GE 3000 56.4 58.3 67.1 68.7 71.9 72.6 73.4 74.3 75.0 75.7 76.1 76.3 76.5 76.8 77.0 77.5 76.6 77.3 78.8 Œ 2500 58.1 60.1 69.1 70.8 74.1 74.9 75.7 78.0 78.4 78.6 79.1 79.3 79.9 Œ 2000 60.8 62.9 72.1 77.2 78.0 78.9 81.5 81.9 82.1 82.3 82.6 73.8 80.0 80.8 82.8 75.1 79.4 82.2 82.9 83.2 83.7 84.2 GE 1800 61.9 64.1 73.4 78.6 80.3 81.3 83.5 84.0 84.8 Œ 1500 63.8 66.1 75.6 77.4 81.0 81.8 82.7 83.8 84.6 85.3 85.7 85.9 86.2 86.5 86.7 87.3 Œ 1200 65.6 68.0 77.8 79.6 83.3 84.2 85.1 86.2 87.0 87.8 88.2 88.4 88.6 88.9 89.2 Œ 1000 66.8 69.2 79.4 81.2 85.1 85.9 87.0 88.1 88.9 89.7 90.1 90.3 90.5 90.8 91.1 91.6 Œ 900 67.6 70.0 80.4 82.3 86.2 87.1 88.1 89.2 90.1 90.9 91.3 91.5 91.8 92.0 92.3 92.9 93.1 Œ 800 68.0 70.4 81.0 82.9 86.9 87.8 88.8 90.0 90.8 91.6 92.1 92.3 92.5 92.8 93.6 Œ 700 68.3 70.8 81.5 83.5 87.5 68.5 89.6 90.7 91.6 92.4 92.9 93.1 93.3 93.6 93.9 94.4 95.0 Œ 600 68.6 71.2 82.1 84.2 88.5 89.5 90.6 91.8 92.7 93.5 94.0 94.2 94.4 94.8 95.6 Œ 69.0 71.6 82.8 85.0 89.5 95.6 95.9 96.5 500 90.6 91.7 93.0 94.1 95.4 96.2 97.0 94.9 GE 400 69.1 71.7 82.9 85.1 89.7 90.7 91.8 93.2 94.2 95.1 95.6 95.9 96.1 96.4 96.7 97.3 Œ 300 69.2 71.7 83.0 85.2 89.8 90.9 92.1 93.5 94.6 95.5 96.0 96.3 96.6 96.9 97.2 Œ 97.4 200 69.2 71.7 83.0 85.2 89.8 90.9 92.2 97.0 97.9 93.6 94.7 95.7 96.3 96.6 98.5 Œ 100 69.2 71.7 83.0 85.2 89.8 90.9 92.2 93.6 94.7 95.7 96.3 96.7 97.2 97.7 98.3 99.6 Œ 000 69.2 71.7 83.0 85.2 89.8 90.9 92.2 93.6 94.7 95.7 96.3 96.7 97.2 97.8 98.5 100.0

TOTAL NUMBER OF OBSERVATIONS 6539

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NAME: SPANDAHLEM AB/GERMANY STATION NUMBER: 106070 PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: OCT HOURS: 00-02 CEILING VISIBILITY IN METERS Œ Œ GE GE GE GE GE Œ GE GE Œ Œ GR IN GR GE GE FRRT 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 25.7 26.7 29.7 30.6 34.1 34.5 36.2 37.0 37.6 38.0 38.3 38.6 38.8 39.3 39.6 40.1 33.3 44.4 GE 20000 28.8 30.1 34.3 38.1 38.6 40.4 41.2 41.8 42.2 42.5 42.8 43.0 43.6 43.9 GE 18000 28.8 30.1 33.3 34.3 38.1 38.6 40.4 41.2 41.8 42.2 42.5 42.8 43.0 43.6 43.9 44.4 GE 16000 28.8 30.1 33.3 34.3 38.1 38.6 40.4 41.2 41.8 42.2 42.5 42.8 43.0 43.6 43.9 44.4 GE 14000 29.0 30.2 33.4 34.4 38.2 38.7 40.6 41.3 41.9 42.3 42.7 42.9 43.1 43.8 44.0 44.5 GR 12000 30.2 38.9 40.R 42.9 29.0 33.5 34.5 38.5 41.5 42.1 42.5 43.1 43.3 44.0 44.2 44.8 42.4 GE 10000 30.4 31.6 36.1 40.1 40.6 43.2 43.8 44.5 45.0 45.2 45.4 46.3 34.9 46.1 46.9 9000 GR 31.2 32.4 35.8 37.0 41.2 41.7 43.5 44.3 44.9 45.6 46.1 46.3 46.5 47.2 47.4 48.0 47.3 GE 8000 33.6 34.8 38.6 39.8 44.0 44.4 46.5 47.8 48.6 49.2 49.4 49.6 50.3 50.5 51.0 7000 46.9 49.5 GE 35.0 40.1 44.8 47.6 48.2 49.0 49.7 49.9 50.8 33.8 38.9 44.3 50.6 51.4 GE 6000 35.0 40.1 44.8 46.9 47.6 48.2 49.0 49.5 49.7 49.9 50.6 50.8 33.8 38.9 44.3 GE 5000 34.1 35.4 39.3 40.6 44.8 45.2 47.3 48.1 48.6 49.4 49.9 50.2 50.4 51.0 51.3 51.8 4500 49.2 GE 35.6 36.9 41.0 42.2 46.4 46.9 49.9 50.5 51.3 51.8 52.0 52.3 52.9 53.1 53.7 GE 4000 38.3 39.8 43.9 45.1 49.8 50.3 52.7 53.5 54.0 54.8 55.4 55.6 55.8 56.5 56.7 57.2 GΒ 3500 41.1 42.5 47.0 48.2 53.0 53.6 56.0 57.1 57.7 58.5 59.1 59.3 59.7 60.3 60.6 61.1 GE 3000 44.0 45.7 50.6 51.8 56.8 57.3 60.1 61.3 61.9 62.8 63.4 63.6 64.0 64.9 65.4 64.6 GE 2500 45.4 47.2 52.3 53.5 58.5 59.0 61.8 63.0 63.5 64.4 65.2 65.4 65.7 66.4 66.6 67.2 GE 2000 48.3 50.1 56.8 62.8 65.5 66.7 67.3 68.2 69.1 69.3 69.6 70.3 70.5 55.5 62.1 71.0 1800 48.5 50.3 57.6 66.4 67.6 68.2 69.1 69.9 70.2 70.5 71.4 CE 56.1 63.0 63.6 71.2 71.9 Œ 1500 53.3 67.8 70.6 72.5 73.6 74.6 74.8 75.1 51.4 60.3 61.8 67.2 71.9 75.8 76.0 76.6 GE 1200 55.2 57.2 65.0 66.5 71.9 72.9 75.7 77.0 77.6 78.7 79.7 79.9 80.2 80.9 81.1 81.7 GE 1000 56.4 58.3 66.9 68.5 74.1 75.6 78 3 79.7 80.2 A1.3 82.3 82.5 82.9 83.5 83.8 84.3 900 56.6 58.6 68.8 79.0 80.3 80.9 82.1 83.2 83.4 83.8 GE 67.2 74.5 76.2 84.4 84.6 85.2 800 57.8 75.8 77.6 GE 59.9 68.5 70.2 80.4 81.8 82.3 83.5 84.6 84.9 85.2 85.9 86.1 86.6 GE 700 58.1 60.2 70.7 77.2 79.4 82.5 83.9 84.4 85.6 86.7 87.0 87.3 88.2 69.1 88.0 88.7 GE 60.6 87.6 88.8 90.5 600 58.5 69.6 71.4 78.3 80.8 84.2 85.5 86.1 89.2 89.5 90.3 91.0 GE 500 59.0 61.1 70.2 72.2 79.1 81.5 85.0 86.3 87.1 88.6 89.8 90.2 90.5 91.3 91.5 92.2 GE 90.1 400 59.2 61.3 70.5 72.5 79.8 82.7 86.2 87.5 88.3 91.7 92.0 92.4 93.1 93.4 94.0 GE 300 59.3 61.4 70.6 72.6 79.9 82.8 86.9 88.2 89.2 91.2 93.0 93.6 94.1 95.0 95.6 96.2 GE 200 59.6 61.7 83.0 87.4 88.7 89.7 91.7 93.7 70.8 72.8 80.1 94.3 94.9 95.9 96.8 97.8 GR 100 59.6 61.7 70.8 72.8 80.1 83.0 87.4 88.7 89.7 91.8 93.8 94.5 95.1 96.4 98.0 99.9 61.7 GR 000 59.6 70.8 72.8 80.1 83.0 87.4 88.7 89.7 91.8 93.8 94.5 95.1 96.4 98.1 100.0

TOTAL NUMBER OF OBSERVATIONS 905

D - 2 - 82

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 MONTH: OCT HOURS: 03-05 LST TO UTC: - 1 VISIBILITY IN METERS CEILING GR IN GR CZ GR CE CR Œ GE GE GR GR GR GR GR GR GE PERT 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 28.6 29.3 29.8 30.0 30.8 NO CRIL 18.4 19.2 21.5 22.0 23.7 24.3 26.4 27.9 30.3 31.3 32.1 GR 20000 20.7 21.5 24.3 24.7 27.0 27.6 29.8 31.3 32.0 32.7 33.4 33.6 34.0 34.4 34.9 **GE 18000** 20.7 29.8 32.0 32.7 33.4 33.6 34.4 34.9 35.7 21.5 24.3 24.7 27.0 27.6 31.3 34.0 **GB 16000** 20.7 21.5 24.3 24.7 27.0 27.6 29.8 31.3 32.0 32.7 33.4 33.6 34.0 34.4 34.9 35.7 GR 14000 21.5 27.0 27.6 32.0 32.7 33.4 33.6 34.9 20.7 24.3 24.7 29.8 31.3 34.0 34.4 35.7 GE 12000 20.7 21.5 24.3 24.7 27.0 27.6 29.8 31.3 32.0 32.7 33.4 33.6 34.0 34.4 34.9 35.7 GR 10000 22.2 23.1 25.9 26.5 28.9 29.5 33.2 34.0 34.7 35.4 35.6 35.9 36.4 36.9 37.7 31.6 9000 27.1 CR 23.4 24.3 27.8 30.3 30.9 33.1 34.6 35.4 36.3 36.9 37.1 37.5 37.9 38.5 39.2 GR 8000 24.9 25.9 29.0 29.7 32.5 33.1 35.6 37.4 38.2 39.2 40.1 40.3 40.7 41.1 41.6 42.4 Œ 7000 25.1 26.0 29.1 29.8 32.7 33.3 35.8 37.6 38.5 39.5 40.3 40.5 40.9 41.3 41.9 42.6 Œ 6000 25.1 26.0 29.1 29.8 32.7 33.3 35.8 37.6 38.5 39.5 40.3 40.5 40.9 41.3 41.9 42.6 Œ 5000 25.3 26.3 29.3 30.0 33.0 33.5 36.0 37.8 38.7 39.7 40.5 40.8 41.1 41.5 42.1 42.9 Œ 4500 26.3 27.3 30.3 31.1 34.2 34.7 37.3 39.0 39.9 41.0 41.9 42.1 42.4 42.9 43.4 44.2 38.0 37.5 45.4 GE 4000 27.8 29.0 32.5 33.8 40.5 42.3 43.2 44.4 45.6 45.9 46.4 46.9 47.7 GE 3500 29.9 31.3 35.4 36.8 40.7 41.3 44.1 45.8 46.8 48.0 49.1 49.3 49.7 50.1 50.7 51.4 44.4 52.5 52.7 GR 3000 32.3 33.7 38.5 39.9 43.7 47.1 48.9 49.9 51.3 53.1 53.5 54.1 54.8 Œ 2500 33.7 35.3 40.2 41.8 45.7 46.4 49.1 50.9 51.9 53.3 54.5 54.7 55.1 55.5 56.0 56.8 38.1 58.0 58.2 GE 2000 36.5 43.5 45.1 49.1 49.8 52.5 54.4 55.4 56.8 58.6 59.0 59.6 60.3 Œ 1800 38.2 39.9 45.7 47.4 51.5 52.2 55.2 57.0 58.0 59.5 60.7 60.9 61.2 61.6 62.2 63.0 GE 1500 41.8 43.4 50.1 51.8 56.3 56.9 60.0 62.0 63.0 64.6 65.8 66.0 66.4 66.8 67.4 68.1 Œ 1200 44.4 46.0 53.2 55.1 59.7 60.5 63.8 65.8 66.8 68.5 69.7 69.9 70.2 70.7 71.2 72.0 47.9 55.9 GR 1000 46.3 58.0 63.0 68.2 70.2 71.3 73.1 74.3 74.5 74.8 75.3 75.8 64.2 76.6 Œ 900 46.6 48.4 56.5 58.6 63.6 64.9 69.3 71.3 72.4 74.2 75.4 75.6 75.9 76.4 76.9 77.7 GE 800 46.8 48.6 57.1 59.3 64.4 65.7 70.1 72.1 73.2 74.9 76.2 76.5 76.8 77.3 77.8 78.6 700 79.7 GE 47.9 49.7 59.2 61.5 67.3 68.7 73.3 75.6 76.7 78.5 80.0 80.3 80.8 81.3 82.1 Œ 600 48.7 50.5 60.4 63.1 69.2 70.7 75.3 77.8 79.0 80.8 82.0 82.3 82.6 83.1 83.6 84.4 GE 500 49.2 51.1 61.2 64.2 70.7 72.3 77.1 79.8 81.1 82.9 84.1 84.4 84.7 85.2 85.7 86.7 Œ 400 49.7 51.5 61.9 65.7 72.6 74.5 80.0 82.7 84.2 85.9 87.5 88.0 88.4 88.8 89.3 90.4 88.6 89.3 300 51.5 72.7 74.7 90.3 GE 49.7 62.0 65.8 80.5 83.3 84.8 86.8 89.9 91.2 92.7 Œ 200 49.7 51.5 62.0 65.8 72.7 74.7 80.5 83.3 84.9 87.3 89.3 90.2 91.1 91.8 93.0 96.9 GE 100 49.7 51.5 72.7 89.3 90.2 62.0 65.8 74.7 80.5 83.3 84.9 87.3 91.1 92.0 93.7 99.7 Œ 000 49.7 51.5 62.0 65.8 72.7 74.7 80.5 83.3 84.9 87.3 89.3 90.2 91.1 92.0 93.7 100.0

TOTAL NUMBER OF OBSERVATIONS 910

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION	NUMBER:	106070		TO UTC:		ndahlem	AB/GER	ANY		PERIOD MONTH:	OF REC	ORD: J. HOURS:	AN 80 - 06-08	DEC 89		
CEILING	• • • • • • •	•••••	• • • • • • •	• • • • • • •	••••••	VISIBIL	יייי איזיי דידיע דאז ו	 Verreng	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	•••••	•••••
IN	GE	GB	GE	GE	GE	GE	GE .	GE	GE	GE	GE	GE	GE	GE	GE	GE
FEET	112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
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NO CEIL	11.9	12.2	17.0	17.4	19.1	19.4	20.4	21.3	21.6	22.6	23.2	23.5	23.8	24.3	25.5	27.0
GE 20000	13.3	13.6	18.6	19.0	21.0	21.4	22.5	23.3	23.7	24.6	25.3	25.6	25.8	26.3	27.5	29.3
GE 20000	13.3	13.6	18.6	19.0	21.0	21.4	22.5	23.3	23.7	24.6	25.3	25.6	25.8	26.3	27.5	29.3
GE 16000	13.3	13.6	18.6	19.0	21.0	21.4	22.5	23.3	23.7	24.6	25.3	25.6	25.8	26.3	27.5	29.3
GE 14000	13.3	13.6	18.6	19.0	21.1	21.5	22.6	23.4	23.8	24.7	25.4	25.7	25.9	26.5	27.6	29.4
GE 12000	13.3	13.6	18.6	19.0	21.1	21.5	22.6	23.4	23.8	24.7	25.4	25.7	25.9	26.5	27.6	29.4
GE 10000	14.0	14.4	19.8	20.4	22.7	23.1	24.3	25.5	25.8	26.8	27.4	27.9	28.1	28.6	29.8	31.5
GE 9000	14.7	15.0	20.4	21.1	23.3	23.8	24.9	26.1	26.5	27.4	28.1	28.5	28.7	29.3	30.5	32.2
GE 8000 GE 7000	16.0 16.1	16.3 16.4	21.7 21.8	22.4 22.5	25.1 25.2	25.6 25.7	26.8 27.0	28.1 28.5	28.7 29.2	29.7 30.1	30.6 31.1	31.1 31.6	31.3 31.9	31.9 32.4	33.0 33.6	34.8 35.3
GE 6000	16.1	16.4	21.8	22.5	25.4	25.7	27.0	28.7	29.4	30.1	31.3	31.9	32.1	32.4	33.8	35.5
GE 0000	10	10.4	21.0	22.5	23.4	23.3	21.2	20.,	23.4	30.3	32.5	34.3	32.1	32.0	33.0	33.3
GE 5000	16.3	16.6	22.0	22.7	25.6	26.1	27.4	28.9	29.6	30.6	31.5	32.2	32.4	32.9	34.1	35.9
GE 4500	17.1	17.4	23.3	24.6	28.0	28.5	29.8	31.3	32.1	33.0	34.0	34.7	34.9	35.4	36.6	38.3
GE 4000	18.1	18.5	25.4	26.8	30.1	30.7	32.0	33.5	34.2	35.3	36.3	36.9	37.1	37.7	38.9	40.6
GE 3500	20.0	20.3	28.2	29.7	33.4	33.9	35.5	37.0	37.8	38.9	39.8	40.5	40.7	41.4	42.8	44.5
GE 3000	22.1	22.5	30.7	32.2	36.2	36.7	38.3	40.0	40.8	41.9	43.0	43.6	43.8	44.5	45.9	47.6
GE 2500	23.8	24 1	30 5	34.0	20.0	38.6	40.0	41 0	42.7	43.7	44.8	45.5	45.7	46.3	47.7	40 5
GE 2000	25.7	24.1 26.0	32.5 35.3	36.9	38.0 41.4	42.0	40.2 43.7	41.8 45.5	45.3	47.4	48.5	49.1	49.4	50.0	47.7 51.4	49.5 53.1
GE 1800	27.4	27.8	37.1	38.8	43.3	44.0	45.7	47.4	48.3	49.4	50.4	51.1	51.3	51.9	53.3	55.1
GE 1500	31.3	31.6	42.0	43.7	48.4	49.1	51.1	52.9	53.8	55.0	56.2	56.8	57.1	57.9	59.3	61.0
GE 1200	33.6	34.0	45.2	47.1	52.5	53.2	55.2	57.0	58.1	59.4	60.6	61.2	61.7	62.5	63.9	65.7
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GE 1000	34.6	35.0	47.3	49.4	55.2	56.0	58.5	60.4	61.6	62.9	64.3	64.9	65.3	66.2	67.6	69.3
GE 900	35.3	35.7	48.7	50.9	56.8	57.7	60.2	62.0	63.3	64.8	66.2	66.8	67.4	68.3	69.7	71.4
GE 800 GE 700	36.1	36.5 37.8	50.6	52.9	59.0	59.9 63.2	62.5	64.5	65.9 69.4	67.4	68.8	69.5	70.1 73.9	71.0	72.4	74.1
GE 600	37.4	38.4	52.8 53.9	55.4 56.8	62.0 64.3	65.7	65.8 68.3	67.8 70.5	72.1	71.0 73.7	72.5 75.2	73.2 75.9	76.6	74.7 77.4	76.1 78.8	77.9 80.6
GE 000	30.0	30.4	33.9	50.0	04.5	03.7	00.3	,,,,	,	,,,,,	, , , ,	73.3	,0.0	,,,,	,0.0	00.0
GE 500	38.3	38.8	54.5	57.7	65.8	67.6	70.6	73.4	75.3	76.8	78.3	79.0	79.8	80.8	82.2	83.9
GE 400	38.3	38.8	55.4	58.7	67.4	69.7	73.0	75.8	77.8	79.7	81.3	82.1	82.9	83.9	85.3	87.0
GE 300	38.3	38.8	55.6	59.1	67.8	70.5	74.4	77.6	79.8	81.9	83.5	84.6	85.5	86.7	88.4	90.9
GE 200	38.3	38.8	55.6	59.1	68.0	70.7	74.7	78.0	80.1	82.4	84.6	85.6	86.6	88.1	91.0	95.2
GE 100	38.3	38.8	55.6	59.1	68.0	70.7	74.7	78.0	80.1	82.4	84.8	85.9	86.9	88.8	92.9	99.6
GE 000	38.3	38.8	55.6	59.1	68.0	70.7	74.7	78.0	80.1	82.4	84.8	85.9	86.9	88.8	92.9	100.0

PERCENTAGE PREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: OCT HOURS: 09-11 CRILING VISIBILITY IN METERS IN GE Œ GR GE GE ge ge GB GE Œ GE GE GE Œ GE Œ 112 80 48 24 20 16 06 00 FEET 90 60 40 32 12 10 08 04 NO CEIL 12.6 12.8 16.1 16.8 18.8 19.8 20.2 20.9 21.7 22.3 22.7 23.0 23.1 23.4 24.0 25.1 GR 20000 13.3 18.4 23.9 24.7 25.3 25.7 27.0 13.5 19.1 21.7 22.8 23.2 26.0 26.1 26.5 28.7 GE 18000 13.3 13.5 18.4 19.1 21.7 22.8 23.2 23.9 24.7 25.3 25.7 26.0 26.1 26.5 27.0 28.7 GE 16000 13.3 13.5 18.4 19.1 21.7 22.8 23.9 24.7 25.3 25.7 26.0 26.1 26.5 27.0 23.2 28.7 GE 14000 13.3 13.5 18.4 19.1 21.7 22.8 23.2 23.9 24.7 25.3 25.7 26.0 26.1 26.5 27.0 28.7 GE 12000 13.3 13.5 18.4 19.1 21.7 22.8 23.2 23.9 24.7 25.3 25.7 26.0 26.1 26.5 27.0 28.7 GE 10000 13.7 13.9 19.2 20.0 23.0 24.2 24.8 25.5 26.3 26.9 27.3 27.6 27.7 28.1 28.6 30.3 27.5 GR 9000 14.3 14.5 19.9 20.6 23.7 24.8 25.5 26.1 27.0 28.0 28.3 28.4 28.7 29.2 31.0 29.4 GE 8000 15.1 15.3 20.9 21.8 25.2 26.5 27.3 28.0 28.8 29.8 30.1 30.2 30.5 31.1 32.8 GE 7000 15.3 21.3 27.1 28.0 28.6 29.5 30.0 30.8 15.5 22.3 25.8 30.4 30.9 31.2 31.7 33.4 GE 6000 15.7 30.0 30.5 15.9 21.8 22.8 26.3 27.6 28.5 29.1 31.0 31.3 31.4 31.7 32.3 34.0 GE 5000 16.5 16.7 22.8 23.9 27.5 28.9 29.8 30.5 31.4 31.9 32.4 32.7 32.8 33.2 33.9 35.7 CR 4500 16.9 17.1 25.2 30.4 32.0 32.9 33.4 33.9 35.4 23.8 28.9 31.3 34.2 34.3 34.7 37.2 4000 18.6 26.0 27.4 31.2 32.7 35.2 35.8 36.3 36.8 36.9 37.4 38.1 Œ 18.9 33.5 34.3 40.0 GE 3500 21.2 39.0 28.9 38.4 39.6 40.0 41.4 21.5 30.3 34.1 35.8 36.7 37.4 40.2 40.8 43.3 37.6 GE 3000 24.0 24.4 32.3 33.7 39.4 40.2 41.1 42.0 42.7 43.2 43.7 43.9 44.4 45.1 47.0 43.7 44.7 45.6 GR 2500 25.8 26.2 34.8 36.2 40.2 41.9 42.8 46.2 46.7 47.0 47.5 48.2 50.1 Œ 2000 28.1 28.5 38.0 39.5 44.0 45.7 47.5 48.5 49.5 50.1 50.8 52.3 46.6 51.1 51.6 54.2 GE 1800 29.4 29.9 39.6 47.3 48.2 50.2 41.2 45.6 49.1 51.2 51.8 52.5 52.8 53.3 54.0 55.9 GE 1500 34.1 34.8 45.9 47.6 52.2 54.1 55.1 56.1 57.3 58.4 59.0 59.7 60.0 60.6 61.4 63.4 Œ 1200 36.9 37.7 49.5 51.4 56.1 58.1 59.0 60.1 61.3 62.4 63.0 63.8 64.1 64.7 65.5 67.5 Œ 1000 39.2 40.2 53.2 55.3 60.5 62.8 64.0 65.2 66.3 67.4 68.2 68.9 69.2 69.9 70.6 72.7 Œ 900 40.0 41.0 54.7 57.0 62.7 65.1 66.5 67.6 68.9 70.2 71.0 71.7 72.7 73.4 72.0 75.5 800 71.7 40.8 55.7 70.4 GR 41.7 58.1 64.1 66.5 67.8 69.1 72.5 73.2 73.5 74.2 74.9 77.0 Œ 700 41.5 58.0 72.3 73.5 42.5 60.5 67.0 69.4 70.9 74.9 75.7 76.5 76.9 77.5 78.3 80.3 600 42.2 79.6 80.2 GE 61.8 77.4 43.1 59.0 68.6 71.1 72.7 74.5 76.0 78.3 79.0 81.0 83.0 Œ 500 42.5 43.4 60.3 63.5 71.3 74.3 76.2 78.7 80.6 82.0 83.0 85.5 86.2 88.3 84.1 84.8 400 GR 42.5 43.5 60.5 63.9 71.6 74.9 77.2 80.0 82.4 83.8 84.8 86.2 87.0 87.7 88.6 90.9 Œ 300 42.6 43.5 60.6 64.0 71.8 75.3 77.5 80.5 83.1 84.7 86.2 87.8 88.7 89.5 90.8 93.7 Œ 200 42.6 60.8 83.4 85.3 43.5 64.2 72.0 75.5 77.7 80.8 88.4 91.2 92.8 86.8 89.5 97.1 Œ 100 42.6 43.5 60.8 64.2 72.0 75.5 77.7 80.8 83.4 85.3 87.0 88.6 89.7 91.5 93.9 99.9 GB 000 42.6 43.5 60.8 64.2 72.0 75.5 77.7 80.8 83.4 85.3 87.0 88.6 89.7 91.5 94.0 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: OCT HOURS: 12-14 CRILING VISIBILITY IN METERS IN CE GE Œ GE GE GE GE GE Œ GE GE GE Œ GE GE 112 90 FEET 60 48 40 32 20 16 12 80 24 10 08 06 04 00 27.6 27.6 27.7 27.8 27.8 27.8 27.8 27.8 NO CEIL 19.4 20.2 25.2 25.8 26.9 27.5 27.8 27.8 GE 20000 23.1 24.2 30.4 31.2 33.5 33.5 33.8 33.9 33.9 33.9 32.7 33.4 33.9 33.9 33.9 33.9 GE 18000 23.1 24.2 30.4 31.2 32.7 33.4 33.5 33.5 33.8 33.9 33.9 33.9 33.9 33.9 33.9 33.9 GE 16000 23.1 24.2 30.4 31.2 32.7 33.4 33.5 33.5 33.8 33.9 33.9 33.9 33.9 33.9 33.9 33.9 GE 14000 23.1 34.0 30.5 31.3 32.8 34.0 34.0 24.2 33.5 33.7 33.7 33.9 34.0 34.0 34.0 34.0 GE 12000 23.3 24.4 33.9 34.2 34.2 30.8 31.5 33.0 33.8 33.9 34.1 34.2 34.2 34.2 34.2 34.2 GE 10000 24.7 25.8 32.4 33.2 34.7 35.5 35.6 35.6 35.8 35.9 35.9 35.9 35.9 35.9 35.9 35.9 GE 9000 25.3 26.3 33.0 33.9 35.4 36.1 36.2 36.3 36.6 36.7 36.7 36.7 36.7 36.7 36.7 36.7 37.7 GE 8000 26.3 27.4 34.5 35.4 36.9 37.6 38.0 38.2 38.3 38.3 38.3 38.3 38.3 38.3 38.3 GE 7000 26.8 27.8 35.9 38.3 38.5 38.7 38.8 38.8 38.8 35.1 37.4 38.2 38.8 38.8 38.8 38.8 38.6 39.1 39.1 GE 6000 27-1 28.2 35.4 36.2 37.7 38.5 38.8 39.0 39.1 39.1 39.1 39.1 39.1 GE 5000 28.6 29.7 37.2 38.1 39.6 40.3 40.4 40.6 40.9 41.0 41.0 41.0 41.0 41.0 41.0 41.0 40.6 GR 4500 29.5 30.6 30.1 41.6 41 . R 42.0 42.2 42.3 42.3 38.3 41.4 42.3 42.3 42.3 42.3 GE 4000 31.8 33.0 41.8 43.3 44.1 44.3 44.5 44.7 44.8 44.9 44.9 41.0 44.9 44.9 44.9 44.9 GE 3500 36.0 47.6 37.2 48.7 49.0 49.2 49.4 49.5 49.5 49.5 49.5 45.3 46.1 48.5 49.5 49.5 GE 3000 41.5 43.1 51.7 52.8 54.5 55.5 55.8 56.2 56.5 56.6 56.7 56.7 56.7 56.7 56.7 56.7 GE 2500 44.0 45.7 54.5 55.7 57.5 58.7 59.0 59.5 59.7 59.8 59.9 59.9 59.9 59.9 59.9 59.9 GE 2000 48.2 50.0 54:4 64.9 65.4 65.5 65.5 59.9 61.1 62.9 64.1 65.3 65.5 65.5 65.5 65.5 GE 1800 50.1 52.2 63.3 65.4 66.9 67.4 67.7 67.8 68.0 68.0 68.0 62.2 66.6 68.0 68.0 68.0 1500 GE 55.4 57.4 68.8 70.2 72.7 74.1 74.6 75.2 75.5 75.6 75.7 75.7 75.7 75.7 75.7 75.7 GE 1200 58.1 60.1 72.5 73.9 76.9 78.3 79.1 79.7 80.0 80.1 80.2 80.2 80.2 80.2 80.2 80.2 GR 1000 59.0 61.1 74.4 75.9 79.4 80.8 81.6 82.3 82.7 82.8 82.9 83.0 83.0 83.0 83.0 83.0 GE 900 60.0 62.2 76.1 77.8 81.4 83.0 84.7 85.3 85.4 85.5 85.6 85.6 85.6 84.0 85.6 85.6 87.2 800 60.5 87.3 GP. 62.8 77.2 78.9 83.0 84.7 85.7 86.5 87.1 87.4 87.4 87.4 87.4 87.4 700 90.1 GE 61.2 63.4 78.5 80.4 85.3 87.4 88.4 89.1 89.8 89.9 90.2 90.2 90.3 90.3 90.3 92.5 600 61.3 GR 63.7 79.5 81.9 87.2 89.5 90.4 91.3 92.0 92.2 92.4 92.5 92.6 92.6 92.6 GE 500 79.8 90.8 92.9 93.7 93.9 94.1 94.2 61.4 63.8 82.6 88.4 91.8 94.2 94.3 94.3 94.3 GR 400 61.7 64.1 80.2 83.0 89.0 91.5 92.6 93.9 94.6 95.2 95.6 95.7 95.8 96.0 96.1 96.1 GE 300 61.9 64.3 80.4 83.2 89.2 91.9 93.0 94.4 95.4 96.1 97.1 97.2 97.3 97.6 97.7 97.7 GE 200 61.9 97.4 98.1 80.4 83.2 89.2 94.5 96.3 97.7 64.3 91.9 93.1 95.6 98.7 99.1 99.5 GE 100 61.9 64.3 80.4 83.2 89.2 91.9 93.1 94.5 95.6 96.3 97.4 97.7 98.1 98.8 99.6 100.0 GE 000 61.9 64.3 80.4 83.2 89.2 91.9 93.1 94.5 95.6 96.3 97.4 97.7 98.1 98.8 99.6 100.0

TOTAL NUMBER OF OBSERVATIONS 930

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: JAN 80 - DEC 89 STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY LST TO UTC: - 1 MONTH: OCT HOURS: 15-17 CEILING VISIBILITY IN METERS Œ IN CR GR GR Œ GR GR GE GR GE GR GR GE GR GR Œ FEET 112 24 20 00 90 80 60 48 40 32 16 12 10 80 06 04 NO CEIL 23.1 24.4 29.1 29.8 30.0 30.0 30.1 30.1 30.1 30.1 30.1 30.1 30.1 30.0 30.1 GE 20000 37.2 28.2 29.9 35.3 36.1 36.8 36.9 37.1 37.2 37.2 37.2 37.2 37.2 37.2 37.2 37.2 37.2 GE 18000 35.5 37.4 37.5 37.5 37.5 37.5 37.5 37.5 37.5 28.3 30.0 36.5 37.1 37.5 37.5 GR 16000 28.3 30.0 35.6 36.6 37.2 37.3 37.5 37.6 37.6 37.6 37.6 37.6 37.6 37.6 37.6 37.6 GE 14000 28.9 30.6 36.3 37.3 38.0 38.1 38.3 38.4 38.4 38.4 38.4 38.4 38.4 38.4 38.4 38.4 GE 12000 29.2 31.1 36.9 39.0 39.0 39.0 38.0 38.6 38.7 38.9 39.0 39.0 39.0 39.0 39.0 39.0 43.3 GE 10000 32.3 40.8 43.2 34.3 42.0 42.9 43.0 43.3 43.3 43.3 43.3 43.3 43.3 43.3 43.3 44.1 44.1 GE 9000 32.9 34.9 41.4 42.8 43.7 43.8 44.0 44.1 44.1 44.1 44.1 44.1 44.1 44.1 GE 8000 36.8 43.9 46.9 46.9 46.9 46.9 34.6 45.4 46.2 46.6 46.8 46.9 46.9 46.9 46.9 46.9 GR 7000 34.8 37.0 44.1 45.6 46.5 46.8 47.0 47.1 47.1 47.1 47.1 47.1 47.1 47.1 47.1 47.1 GR 6000 35.2 37.3 44.4 45.9 46.8 47.1 47.3 47.4 47.4 47.4 47.4 47.4 47.4 47.4 47.4 Œ 5000 i 36.5 38.7 45.8 47.3 48.2 48.5 48.7 48.8 48.8 48.8 48.8 48.8 48.8 48.8 48.8 48.8 GE 4500 38.3 40.5 47.7 49.2 50.2 50.5 50.8 50.9 50.9 50.9 50.9 50.9 50.9 50.9 50.9 50.9 Œ 4000 41.8 44.2 51.7 53.2 54.2 54.5 54.8 54.9 54.9 54.9 54.9 54.9 54.9 54.9 54.9 54.9 GR 3500 46.3 48.9 57.0 58.7 59.7 60.0 60.3 60.4 60.4 60.4 60.4 60.4 60.4 60.4 60.4 60.4 GR 3000 52.2 67.1 67.5 54.9 63.9 65.6 66.8 67.4 67.5 67.5 67.5 67.5 67.5 67.5 67.5 67.5 GE 2500 55.5 58.3 67.4 69.5 70.8 71.1 71.5 71.5 71.5 71.5 71.5 71.5 71.5 71.4 71.5 71.5 GR 2000 58.8 61.7 72.0 74.1 75.8 76.2 76.6 76.7 76.7 76.7 76.7 76.7 76.7 76.7 76.7 76.7 Œ 1800 59.5 62.4 73.2 75.4 77.2 77.8 78.2 78.3 78.3 78.3 78.3 78.3 78.3 78.3 78.3 78.3 1500 76.6 82.0 Œ 61.9 64.8 78.9 81.0 81.6 81.9 82.0 82.0 82.0 82.0 82.0 82.0 82.0 82.0 1200 79.1 85.9 86.0 86.0 86.0 Œ 64.0 67.0 81.7 84.5 85.3 85.7 85.8 86.0 86.0 86.0 86.0 GR. 1000 65.4 68.4 81.4 84.0 87.8 88.6 89.1 89.2 89.4 89.5 89.5 89.5 89.5 89.5 89.5 89.5 900 65.7 68.7 89.9 90.0 90.1 90.2 90.2 90.2 Œ 82.0 84.6 88.5 89.2 90.2 90.2 90.2 90.2 Œ 800 66.2 69.4 83.4 86.0 90.5 91.3 92.0 92.2 92.4 92.5 92.5 92.5 92.5 92.5 92.5 92.5 Œ 700 66.9 70.0 84.5 87.4 92.2 93.0 93.8 93.9 94.4 94.5 94.5 94.5 94.5 94.6 94.6 94.6 600 67.5 70.6 85.3 96.1 96.1 Œ 88.2 93.1 94.4 95.3 95.5 96.0 96.1 96.1 96.2 96.2 96.2 70.8 Œ 500 67.6 85.4 88.3 93.2 94.5 95.4 95.7 96.2 96.5 96.6 96.6 96.6 96.8 96.8 96.8 400 67.6 85.4 98.1 GR 70.8 88.4 93.8 95.1 96.2 97.0 97.5 98.0 98.1 98.1 98.3 98.3 98.3 Œ 300 67.6 70.8 85.4 88.4 93.8 95.1 96.3 97.1 97.7 98.5 98.9 98.9 99.1 99.4 99.4 99.4 Œ 200 67.6 70.8 85.4 88.4 93.8 96.3 97.2 98.7 99.1 99.1 99.7 99.8 99.9 95.1 98.0 99.5

TOTAL NUMBER OF OBSERVATIONS 930

70.8

85.4

88.4

93.8

95.1

96.3

CE

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100

67.6

97.2

000 67.6 70.8 85.4 88.4 93.8 95.1 96.3 97.2 98.0 98.7 99.1 99.1 99.5 99.8 99.9 100.0

98.0

98.7

99.1

99.1

99.5

99.8

99.9

100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: OCT HOURS: 18-20 CBILING VISIBILITY IN METERS GE GE GE GE GE Œ GE Œ IN Œ GE Œ GE Œ GE GE GR PERT 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 29.0 29.4 33.8 35.2 36.1 36.2 36.5 36.6 36.6 36.6 36.6 36.6 36.6 36.6 36.6 36.6 GE 20000 32.2 32.5 37.4 39.1 40.6 40.8 41.3 41.5 41.5 41.5 41.5 41.5 41.5 41.5 41.5 41.5 GE 18000 32.2 32.5 37.4 39.1 40.6 40.8 41.3 41.5 41.5 41.5 41.5 41.5 41.5 41.5 41.5 41.5 37.4 GR 16000 32.2 32.5 39.1 40.6 40.8 41.3 41.5 41.5 41.5 41.5 41.5 41.5 41.5 41.5 41.5 GE 14000 32.7 33.0 39.9 41.5 42.0 42.3 42.3 42.3 42.3 38.2 41.4 42.3 42.3 42.3 42.3 42.3 GE 12000 32.9 33.2 38.4 40.1 41.6 41.7 42.3 42.5 42.5 42.5 42.5 42.5 42.5 42.5 42.5 42.5 GE 10000 35.8 36.2 41.5 43.4 45.3 45.4 45.9 46.1 46.1 46.1 46.1 46.1 46.1 46.1 46.1 46.1 46.9 GR 9000 36.3 36.8 42.3 44.2 46.0 46.1 46.7 46.9 46.9 46.9 46.9 46.9 46.9 46.9 46.9 39.0 39.6 50.4 50.8 50.8 GE 8000 45.4 47.3 49.6 49.7 50.9 50.9 51.0 51.0 51.0 51.0 51.0 GR 7000 39.7 40.2 48.3 50.5 50.6 51.4 51.7 51.7 51.8 51.8 51.9 51.9 51.9 46.3 51.9 51.9 GE 6000 40.0 40.5 46.7 48.6 50.9 51.0 51.7 52.0 52.0 52.2 52.2 52.3 52.3 52.3 52.3 52.3 GE 5000 40.5 41.1 47.2 49.1 51.4 51.5 52.3 52.6 52.6 52.7 52.7 52.8 52.8 52.8 52.8 52.8 GE 4500 42.8 43.4 49.9 51.8 54.2 55.3 55.3 55.4 55.4 55.5 55.5 54.1 54.9 55.5 55.5 55.5 GE 4000 47.0 47.7 55.2 57.4 60.2 60.3 61.1 61.4 61.4 61.5 61.5 61.6 61.6 61.6 61.6 61.6 GB 3500 51.3 52.3 59.9 62.2 65.3 65.5 66.2 66.6 66.6 66.7 66.7 66.8 66.8 66.8 66.8 66.8 GE 3000 55.3 56.2 64.2 66.5 69.9 70.1 70.9 71.2 71.2 71.3 71.3 71.4 71.4 71.4 71.4 71.4 GE 2500 57.2 58.4 69.0 72.9 73.7 74.0 74.0 74.1 74.1 74.2 74.2 66.6 72.7 74.2 74.2 74.2 GE 2000 0.0.3 61.6 70.4 73.1 76.8 77.0 77.8 78.2 78.2 78.3 78.3 78.4 78.5 78.5 78.5 78.5 GR 1800 61.7 63.0 71.8 74.5 78.2 78.5 79.4 79.7 79.7 79.8 79.8 79.9 80.0 80.0 80.0 80.0 77.7 83.3 GE 1500 64.5 65.8 75.1 81.6 82.0 82.9 83.2 83.2 83.3 83.4 83.5 83.5 83.5 83.5 GE 1200 6**6.6** 68.0 78.0 80.8 84.9 85.6 86.5 86.8 86.8 87.0 87.2 87.3 87.4 87.4 87.4 87.4 GE 1000 67.5 69.0 79.7 82.5 87.1 87.7 88.6 88.9 88.9 89.1 89.4 89.5 89.6 89.6 89.6 89.6 GR 900 6**7.6** 69.1 80.3 83.1 88.1 88.9 89.8 90.1 90.1 90.3 90.5 90.6 90.8 90.8 90.8 90.8 GE 800 58.2 69.7 81.0 83.9 88.9 89.9 90.8 91.1 91.1 91.4 91.6 91.7 91.8 91.8 91.8 91.8 GE 700 89.9 92,9 68.5 70.0 81.7 84.6 90.9 91.8 92.2 92.2 92.5 92.7 92.8 92.9 92.9 92.9 GE 600 69.0 70.5 85.3 90.6 91.8 93.0 93.4 93.4 93.8 94.1 94.2 94.3 94.3 82.3 94.3 94.3 GR 500 υ**9.2** 70.8 82.7 85.7 91.1 92.4 93.8 94.3 94.4 95.1 95.5 95.6 95.7 95.8 96.0 96.0 GE 69.2 70.8 94.8 95.9 96.0 400 82.7 85.8 91.2 92.5 94.1 94.6 95.5 96.1 96.2 96.5 \$6.5 97.4 GE 70.8 92.5 94.2 97.0 97.5 300 5**9.2** 82.7 85.8 91.2 95.1 95.3 96.3 96.9 97.8 97.8 GE 200 3**9.2** 70.8 82.7 85.8 92.9 94.8 95.7 96.1 97.2 98.1 98.4 99.1 99.2 99.9 100.0 91.4 GR 100 ö**9.2** 70.8 85.8 95.7 96.1 97.2 98.1 98.4 99.1 99.2 82.7 91.4 92.9 94.8 99.9 100.0 000 69.2 70.8 82.7 85.8 91.4 92.9 94.8 95.7 96.1 97.2 98.1 98.4 99.1 99.2 99.9 100.0 GE

TOTAL NUMBER OF OBSERVATIONS 930

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM BOURLY OBSERVATIONS

STA	rion 1	weer:	106070		TO UTC:		ndahlem	AB/GER	MANY		PERIOD MONTH:		ORD: JA	AN 80 - 21-23	DEC 89		
CRI	LING		• • • • • • •	• • • • • •	• • • • • • •	• • • • • • • •	VISIBIL	TTY IN I		• • • • • • •	• • • • • • •	• • • • • •	• • • • • •	• • • • • • •	• • • • • • •	•••••	• • • • • •
I		GE	GE	GE	Œ	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE
PE	et	112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
•••	• • • • • •	· • • • • • • •			• • • • • •	• • • • • •	• • • • • • •	• • • • • •		• • • • • • •			• • • • • •			• • • • • •	• • • • • •
NO (CEIL	29.2	30.3	33.6	35.0	37.2	38.0	38.8	39.1	39.1	39.4	39.5	39.8	39.8	39.8	39.8	39.8
GR :	20000	32.9	34.2	37.7	39.2	42.1	43.0	44.1	44.4	44.5	44.8	44.9	45.2	45.2	45.2	45.2	45.2
	18000	30.0	34.2	37.7	39.2	42.1	43.0	44.1	44.4	44.5	44.8	44.9	45.2	45.2	45.2	45.2	45.2
GE :	16000	32.9	34.2	37.7	39.2	42.1	43.0	44.1	44.4	44.5	44.8	44.9	45.2	45.2	45.2	45.2	45.2
GE :	14000	33.0	34.3	37.8	39.3	42.2	43.1	44.2	44.5	44.6	44.9	45.0	45.3	45.3	45.3	45.3	45.3
GE :	12000	33.1	34.4	37.9	39.4	42.3	43.2	44.3	44.6	44.7	45.0	45.2	45.4	45.4	45.4	45.4	45.4
	10000	35.1	36.4	40.0	41.9	44.8	45.7	46.8	47.1	47.2	47.5	47.6	47.8	47.8	47.8	47.8	47.8
GB	9000	35.7	37.0	40.8	42.8	45.7	46.6	47.6	48.0	48.1	48.4	48.5	48.7	48.7	48.7	48.7	48.7
Œ	8000	38.5	39.8	43.8	45.8	48.7	49.6	50.8	51.1	51.2	51.6	51.7	51.9	51.9	51.9	51.9	52.2
GE	7000	38.6	39.9	44.2	46.2	49.1	50.0	51.2	51.5	51.6	52.0	52.2	52.4	52.4	52.4	52.4	52.6
Œ	6000	39.1	40.4	44.7	46.8	49.7	50.5	51.7	52.0	52.2	52.6	52.7	52.9	52.9	52.9	52.9	53.1
GE	5000	40.0	41.3	45.6	47.6	50.5	51.4	52.6	52.9	53.0	53.4	53.6	53.8	53.8	53.8	53.8	54.0
GE	4500	41.3	42.6	47.0	49.0	51.9	52.8	54.1	54.4	54.5	55.1	55.2	55.4	55.4	55.4	55.4	55.6
GE	4000	45.6	47.0	51.5	53.7	57.0	57.9	59.2	59.5	59.6	60.1	60.2	60.5	60.5	60.5	60.5	60.7
GE	3500	49.4	50.9	55.6	57.8	61.7	62.6	64.1	64.4	64.5	65.2	65.3	65.5	65.5	65.5	65.5	65.7
Œ	3000	53.3	54.8	59.9	62.1	66.2	67.0	68.6	69.0	69.1	69.8	69.9	70.2	70.2	70.2	70.2	70.4
		ĺ															
Œ	2500	55.4	57.0	62.2	64.3	68.5	69.4	71.0	71.3	71.4	72.2	72.3	72.5	72.5	72.5	72.5	72.7
GB	2000	58.4	60.1	65.5	67.7	71.9	72.7	74.4	74.7	74.8	75.5	75.6	75.9	75.9	75.9	75.9	76.1
Œ	1800	59.3	61.0	66.4	68.5	72.8	73.7	75.3	75.6	75.8	76.5	76.6	76.8	76.8	76.8	76.8	77.0
Œ	1500	62.1	63.9	69.6	71.9	76.3	77.2	78.8	79.2	79.3	80.3	80.5	80.7	80.7	80.7	80.7	80.9
Œ	1200	64.9	66.7	72.8	75.3	80.1	80.9	82.5	83.0	83.1	84.1	84.3	84.5	84.5	84.5	84.5	84.7
GE	1000	67.1	69.2	75.9	78.4	83.7	84.7	86.3	86.7	86.9	87.8	88.0	88.3	88.3	88.3	88.3	88.5
Œ	900	67.6	69.6	76.5	79.1	84.7	85.7	87.3	87.7	87.8	88.8	89.0	89.2	89.2	89.2	89.2	89.4
Œ	800	68.1	70.2	77.4	80.2	86.2	87.2	88.8	89.3	89.4	90.4	90.6	90.8	90.8	90.8	90.8	91.1
Œ	700	68.6	70.8	78.1	80.9	87.0	87.9	89.5	90.1	90.2	91.2	91.4	91.6	91.6	91.6	91.6	91.8
Œ	600	69.1	71.2	79.1	82.2	88.5	89.4	91.2	91.7	91.8	92.8	93.0	93.2	93.2	93.2	93.2	93.4
		İ															
CE	500	69.2	71.3	79.4	82.8	89.0	90.1	91.9	92.8	93.0	94.1	94.3	94.5	94.5	94.5	94.5	94.7
GE	400	69.2	71.3	79.5	82.9	89.1	90.3	92.2	93.1	93.5	94.6	94.8	95.3	95.3	95.3	95.3	95.5
GE	300	69.2	71.3	79.6	83.0	89.2	90.5	93.1	94.1	94.5	95.7	96.1	96.6	96.7	96.9	96.9	97.1
GE	200	69.2	71.3	79.6	83.1	89.3	90.6	93.3	94.3	94.7	95.9	96.4	97.0	97.3	97.7	98.1	98.4
Œ	100	69.2	71.3	79.6	83.1	89.3	90.6	93.3	94.3	94.7	95.9	96.4	97.0	97.3	98.0	99.1	99.8
GE	000	69.2	71.3	79.6	83.1	89.3	90.6	93.3	94.3	94.7	95.9	96.4	97.0	97.3	98.0	99.4	100.0
•••	• • • • •			,,,,				,,,,				30.4	,,, <u>,</u>				100.0

TOTAL NUMBER OF OBSERVATIONS 928

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: ~ 1 MONTH: OCT HOURS: ALL

					20 010	• -						001 110		•			
CRII	LING	• • • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • • • • • • • • • • • • • • • •	VISIBIL	 TOV TN 1	METERS	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • • •	•••••
II		GE	GE	GE	GE	GE	GE GE	GE	GE	GE	GE	Œ	GE	Œ	GE	GE	GE
FEI		112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
r Esi	PT 1	112	30	80	80	40	40	32	24	20	10	12	10	08	00	V	00
•••			• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •
WO (CEIL	21.2	21.9	25.8	26.6	28.2	28.7	29.5	30.0	30.4	30.7	31.0	31.2	31.3	31.5	31.8	32.3
NO (CBIL	21.2	41.9	23.0	20.0	40.2	20.7	29.3	30.0	30.4	30.7	31.0	31.2	31.3	31.3	31.0	32.3
GP 1	20000	24.0	24.9	29.4	30.4	32.5	33.0	34.0	34.5	34.9	35.3	35.5	35.7	35.8	36.1	36.4	37.0
	18000	24.1	24.9	29.4	30.4	32.5	33.1	34.0	34.6	34.9	35.3	35.6	35.7	35.9	36.1	36.4	37.0
	16000	24.1	24.9	29.5	30.4	32.6	33.1	34.0	34.6	34.9	35.3	35.6	35.8	35.9	36.1	36.4	37.0
	14000	24.2	25.1	29.7	30.6	32.8	33.3	34.3	34.8	35.2	35.6	35.8	36.0	36.1	36.4	36.7	37.3
	12000	24.3	25.2	29.8	30.8	33.0	33.5	34.5	35.0	35.3	35.7	36.0	36.2	36.3	36.5	36.8	37.4
GE .	12000	44.3	23.2	29.0	30.0	33.0	33.3	34.3	75.0	33.3	33.7	30.0	30.2	50.5	30.3	30.0	37.4
GE :	10000	26.0	27.0	31.8	33.0	35.3	35.9	36.8	37.4	37.8	38.2	38.5	38.7	38.8	39.0	39.3	39.9
GE .	9000	26.7	27.6	32.6	33.8	36.2	36.7	37.7	38.3	38.7	39.1	39.4	39.6	39.7	39.9	40.2	40.8
GE	8000	28.5	29.5	34.7	35.9	38.5	39.1	40.2	40.9	41.3	41.8	42.2	42.4	42.5	42.7	43.0	43.6
GE	7000	28.8	29.7	35.1	36.3	38.9	39.6	40.7	41.4	41.8	42.3	42.6	42.8	43.0	43.2	43.5	44.1
GE	6000	29.0	30.0	35.4	36.6	39.2	39.8	41.0	41.7	42.1	42.6	42.9	43.1	43.2	43.5	43.8	44.4
						03.0	0310										
GE	5000	29.7	30.7	36.2	37.4	40.1	40.7	41.8	42.5	42.9	43.4	43.8	44.0	44.1	44.4	44.7	45.3
GE	4500	31.0	32.0	37.7	39.1	41.8	42.4	43.6	44.3	44.8	45.3	45.6	45.9	46.0	46.2	46.6	47.2
GE	4000	33.6	34.8	40.9	42.4	45.4	46.1	47.3	48.0	48.4	49.0	49.4	49.6	49.7	50.0	50.3	51.0
GE	3500	36.9	38.1	44.7	46.2	49.5	50.2	51.5	52.2	52.7	53.3	53.7	53.9	54.1	54.3	54.7	55.3
GE	3000	40.6	42.0	49.0	50.6	54.0	54.7	56.1	56.9	57.4	58.0	58.5	58.7	58.8	59.1	59.5	60.1
GE	2500	42.6	44.0	51.3	53.0	56.5	57.3	58.6	59.5	59.9	60.6	61.1	61.3	61.5	61.7	62.1	62.7
GE	2000	45.6	47.0	55.1	56.8	60.5	61.3	62.7	63.6	64.1	64.7	65.2	65.5	65.7	65.9	66.3	66.9
GE	1800	46.8	48.3	56.6	58.4	62.2	63.0	64.4	65.3	65.8	66.5	67.0	67.2	67.4	67.7	68.0	68.7
GE	1500	50.3	51.9	61.1	63.0	67.0	67.9	69.4	70.3	70.8	71.6	72.2	72.4	72.6	72.9	73.3	73.9
GE	1200	53.0	54.6	64.4	66.5	70.9	71.9	73.5	74.4	75.0	75.8	76.3	76.6	76.8	77.1	77.5	78.2
GE	1000	54.5	56.2	66.9	69.0	73.9	75.1	76.9	77.8	78.4	79.3	79.9	80.1	80.3	80.7	81.0	81.7
GE	900	54.9	56.7	67.8	70.0	75.1	76.4	78.3	79.3	79.9	80.8	81.4	81.7	81.9	82.2	82.6	83.2
GE	800	55.6	57.4	68.9	71.2	76.5	77.9	79.8	80.8	81.5	82.4	83.0	83.3	83.5	83.9	84.2	84.9
GE	700	56.3	58.1	70.3	72.7	78.5	80.0	82.0	83.1	83.9	84.8	85.4	85.7	86.0	86.3	86.7	87.3
GE	600	56.8	58.6	71.2	73.9	80.0	81.7	83.8	85.1	85.8	86.8	87.5	87.8	88.1	88.4	88.8	89.5
GE	500	57.1	58.9	71.7	74.7	81.1	83.0	85.3	86.8	87.7	88.7	89.5	89.8	90.1	90.5	90.9	91.6
GE	400	57.2	59.0	72.1	75.2	81.9	83.9	86.5	88.1	89.2	90.4	91.2	91.7	92.0	92.4	92.9	93.6
GE	300	57.3	59.1	72.2	75.3	82.0	84.2	87.0	86.8	90.0	91.4	92.6	93.1	93.6	94.1	94.7	95.7
GE	200	57.3	59.1	72.2	75.3	82.1	84.3	87.3	89.1	90.4	91.9	93.2	93.9	94.5	95.3	96.3	98.1
GE	100	57.3	59.1	72.2	75.3	82.1	84.3	87.3	89.1	90.4	91.9	93.3	93.9	94.6	95.6	97.1	99.9
	ļ																
GE	000	57.3	59.1	72.2	75.3	82.1	84.3	87.3	89.1	90.4	91.9	93.3	93.9	94.6	95.6	97.2	100.0
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PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: NOV HOURS: 00-02 VISIBILITY IN METERS CRILING IN GE Œ GE Œ GR GR. GE GE GE Œ GE GE GE Œ GR Œ 112 90 48 80 60 40 32 24 20 16 12 10 08 06 04 00 NO CRIL 21.5 22.6 25.4 26.2 27.7 27.9 28.7 29.3 30.9 28.0 28.4 29.8 29.8 29.9 30.3 31.5 GB 20000 22.6 27.7 29.8 29.9 30.2 30.7 31.3 31.8 32.0 32.4 33.0 23.8 26.8 29.4 31.8 33.6 GR 18000 22.6 32.0 23.8 26.8 27.7 29.4 29.8 29.9 30.2 30.7 31.3 31.8 31.8 32.4 33.0 33.6 GE 16000 22.6 23.8 26.8 27.7 29.4 29.8 29.9 30.2 30.7 31.3 31.8 31.8 32.0 32.4 33.0 33.6 GE 14000 22.6 27.7 29.9 30.2 30.7 31.3 31.8 31.8 32.0 32.4 33.0 23.8 26.8 29.4 29.8 33.6 31.7 30.1 30.5 32.4 GE 12000 22.6 23.8 27.0 27.9 29.7 30.0 31.1 32.3 32.3 32.9 33.4 34.0 GE 10000 23.4 24.6 27.9 29.3 31.1 31.5 31.6 32.0 32.6 33.2 33.8 33.8 33.9 34.4 34.9 35.5 Œ 9000 24.1 25.3 28.6 30.0 32.0 32.3 32.8 33.4 34.0 34.7 34.8 35.3 35.9 32.4 34.7 36.4 8000 25.9 34.8 36.1 36.8 37.4 37.9 Œ 27.0 30.5 31.8 33.8 34.1 34.5 35.5 36.8 36.9 38.5 36.9 Œ 7000 26.0 27.1 30.6 32.0 33.9 34.3 34.6 34.9 35.6 36.2 36.9 37.0 37.5 38.0 38.6 Œ 6000 26.3 27.5 30.9 32.3 34.3 34.6 34.9 35.3 36.0 36.6 37.2 37.2 37.4 37.8 38.4 39.0 GE 5000 26.9 28.0 31.5 33.0 34.9 35.3 35.6 36.0 36.7 37.2 37.9 37.9 38.0 38.5 39.1 39.7 Œ 4500 28.5 29.8 33.2 34.7 36.7 37.0 37.4 37.7 38.4 39.1 39.8 39.8 39.9 40.3 40.9 41.5 45.6 Œ 4000 33.0 34.5 37.9 39.4 41.4 41.7 42.1 42.4 43.1 43.8 44.5 44.5 44.6 45.1 46.2 GB 3500 35.2 40.7 42.2 45.1 45.4 46.8 47.5 47.5 47.7 48.2 48.7 36.7 44.4 44.7 46.1 49.3 Œ 3000 36.6 49.1 49.8 50.5 42.5 44.3 46.7 47.7 48.4 49.8 50.0 51.0 38.0 47.0 47.4 51.6 Œ 2500 37.7 39.2 43.7 45.5 47.9 48.3 48.7 49.1 49.8 50.5 51.1 51.1 51.4 51.8 52.4 53.0 αĸ 2000 40.2 41.8 47.2 49.1 51.5 51.8 52.3 52.8 53.6 54.3 54.9 54.9 55.2 55.6 56.2 56.8 Œ 1800 42.1 49.2 51.0 54.9 55.7 56.4 57.1 57.1 57.4 57.8 58.4 59.0 43.8 53.6 53.9 54.4 Œ 1500 44.4 61.1 46.2 52.4 54.4 57.1 57.5 57.9 58.9 59.8 60.5 61.1 61.4 61.8 62.4 63.0 GE 1200 48.5 50.3 57.5 59.5 62.5 62.9 63.3 64.4 65.4 66.1 66.8 66.8 67.0 67.5 68.0 68.6 71.7 GE. 1000 52.1 54.0 61.4 63.4 66.7 67.1 67.8 69.0 70.3 71.0 71.7 72.0 72.4 73.0 73.6 GE 900 53.2 55.2 64.7 69.4 70.8 72.3 73.0 73.7 74.0 74.5 75.1 62.6 68.0 68.6 73.7 75.6 Œ 800 54.0 56.0 63.7 65.7 69.2 69.8 70.6 72.0 73.6 74.4 75.2 75.2 75.5 76.0 76.6 77.1 700 55.3 CE 57.4 65.1 67.2 71.1 71.7 72.5 74.4 76.0 76.9 77.7 77.7 78.0 78.5 79.1 79.7 Œ 600 56.7 58.7 67.0 69.3 73.4 74.8 76.2 78.0 79.7 80.6 81.4 81.4 81.7 82.2 82.8 83.3 GE 500 56.9 67.9 70.2 76.2 59.1 74.8 77.9 80.2 81.8 82.8 83.6 83.6 83.9 84.4 84.9 85.5 GE 400 57.9 69.4 72.0 76.9 78.3 82.5 84.5 85.4 86.2 86.7 87.1 87.7 60.1 80.0 86.3 88.3 300 57.9 Œ 60.1 69.4 72.1 77.4 78.7 80.7 83.3 85.3 86.4 87.6 87.7 88.0 88.9 89.9 90.5 200 57.9 72.2 Œ 60.1 69.4 77.5 79.0 81.0 83.8 86.3 87.6 88.7 89.0 89.5 90.7 92.8 94.4 GR 100 57.9 60.1 69.4 72.2 77.6 79.1 81.1 83.9 86.4 87.7 89.1 89.4 90.0 91.6 94.3 99.7 GE 000 57.9 60.1 69.4 72.2 77.6 79.1 81.1 83.9 86.4 87.7 89.2 89.5 90.1 91.8 94.5 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: JAN 80 - DEC 89 STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY MONTH: NOV HOURS: 03-05 LST TO UTC: - 1 CEILING VISIBILITY IN METERS GR GR GR GR TN GR. GR CIR. GR GR GR Œ GR Œ GR Œ GE FEET 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 17.0 18.3 19.9 20.8 22.6 23.1 24.0 25.1 25.8 26.3 26.5 26.5 27.3 27.7 27.8 28.7 GE 20000 18.0 19.3 21.2 22.2 24.0 24.7 25.6 26.8 27.4 27.9 28.2 28.2 29.4 29.7 30.0 30.9 27.4 28.2 30.9 GE 18000 19.3 25.6 26.8 27.9 28.2 29.4 29.7 30.0 18.0 21.2 22.2 24.0 24.7 GE 16000 18.0 19.3 21.2 22.2 24.0 24.7 25.6 26.8 27.4 27.9 28.2 28.2 29.4 29.7 30.0 30.9 GE 14000 18.0 19.3 21.2 22.2 24.0 24.7 25.6 26.8 27.4 27.9 28.2 28.2 29.4 29.7 30.0 30.9 GE 12000 18.0 27.0 27.7 19.3 21.4 22.4 24.2 24.9 25.8 28.1 28.6 28.6 29.7 30.1 30.3 31.2 GE 10000 18.5 19.7 22.2 23.4 25.3 25.9 26.9 28.0 28.7 29.2 29.6 29.6 30.8 31.1 31.3 32.3 GE 9000 19.3 20.6 23.0 24.2 26.1 26.8 27.7 28.8 29.5 30.0 30.4 30.4 31.6 31.9 32.1 33.1 GR 8000 19.7 21.1 23.9 25.1 27.0 27.7 28.6 29.7 30.4 30.9 31.3 31.3 32.5 32.8 33.1 34.0 GE 7000 30.4 34.0 19.7 21.1 23.9 25.1 27.0 27.7 28.6 29.7 30.9 31.3 31.3 32.5 32.8 33.1 GE 6000 20.1 21.5 24.2 25.5 27.4 28.2 29.2 30.3 31.0 31.5 31.9 31.9 33.1 33.6 34.6 GE 5000 20.4 21.8 24.6 26.1 28.1 28.9 29.9 31.0 31.7 32.1 32.6 32.6 33.8 34.1 34.3 35.2 GR 4500 21.8 23.2 25.9 27.4 29.6 30.4 31.3 32.5 33.2 33.8 34.3 34.3 35.5 35.8 36.1 37.0 GE 4000 39.7 25.5 26.9 29.6 31.1 33.3 34.1 35.1 36.3 37.1 37.7 38.2 38.2 39.4 40.0 40.9 GE 3500 27.3 28.9 31.9 33.4 36.1 37.0 38.0 39.2 40.1 40.8 41.3 41.3 42.5 42.8 43.1 44.0 GE 3000 30.1 34.9 37.5 40.6 41.6 42.5 43.1 28.4 33.4 38.5 39.5 43.1 44.2 44.5 44.8 45.7 GE 2500 30.1 31.8 35.2 36.7 39.5 40.4 41.7 42.8 43.7 44.7 45.2 45.2 46.4 46.7 47.0 47.9 GR 2000 35.2 39.7 41.3 44.1 A7 . A 48.3 49.8 49.8 51.0 77.3 45.0 46.3 49.3 51.3 51.7 52.6 GE 1800 34.7 36.7 41.3 43.1 45.8 46.7 48.1 49.3 50.2 51.1 51.7 51.7 52.8 53.2 53.5 54.4 GE 1500 36.6 38.7 48.6 52.2 53.2 54.6 55.8 43.4 45.2 49.6 51.1 54.1 54.6 56.1 56.5 57.4 GR 1200 40.1 42.4 47.6 49.6 52.9 54.0 56.0 57.4 58.3 59.2 59.8 59.8 61.0 61.3 61.7 62.7 63.3 66,2 GR 1000 57.2 60.7 62.2 43.4 45.7 51.3 53.4 58.6 64.2 64.8 64.8 65.9 66.6 67.6 GE 900 44.9 47.2 53.4 55.5 59.5 60.8 63.0 64.6 65.7 66.6 67.2 67.2 68.3 68.7 69.0 70.0 GE 48.5 57.2 67.9 69.3 800 46.2 55.1 61.4 62.9 65.1 66.8 68.8 69.3 70.5 70.8 71.2 72.2 αP 700 47.0 49.3 56.1 58.2 62.8 64.3 66.9 69.1 70.1 71.2 71.8 71.8 72.9 73.2 73.6 74.6 GE 600 47.5 49.8 57.4 59.6 64.8 66.7 69.8 72.2 73.2 74.3 74.9 74.9 76.0 76.3 76.7 77.7 GE 500 48.9 51.2 59.8 75.3 76.3 77.5 78.2 79.3 79.7 62.1 67.6 69.6 72.9 78.2 80.0 400 49.3 GE 51.5 60.5 69.0 78.2 79.4 81.5 81.6 83.0 83.4 83.7 63.1 71.4 75.3 80.8 84.7 GR 300 49.5 51.8 60.8 63.9 70.1 73.0 78.1 81.3 82.5 83.9 85.0 85.2 86.7 87.1 87.7 88.9 GR 200 49.5 51.8 60.8 63.9 70.1 73.0 78.3 81.5 83.2 84.7 86.2 86.7 88.4 89.8 91.4 93.2 GR 100 49.5 51.8 60.8 63.9 70.1 73.0 78.6 82.2 83.9 85.4 86.9 87.5 89.2 90.9 93.5 99.3 000 49.5 51.8 60.8 63.9 70.1 73.0 78.6 82.2 83.9 85.4 86.9 87.5 89.2 90.9 93.6 100.0 GE

TOTAL NUMBER OF OBSERVATIONS 871

PERCENTAGE PREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 MONTH: NOV HOURS: 06-08 LST TO UTC: - 1 CRILING VISIBILITY IN METERS GR GE GE TN GR Œ Œ GR GR GR GR Œ GR GR GR GR GR FEET 112 90 80 60 48 40 32 24 20 16 12 10 90 06 04 00 21.0 21.6 22.0 NO CEIL 14.6 15.3 17.4 17.9 20.6 22.7 23.0 23.1 23.4 23.6 24.4 24.5 25.3 GR 20000 16.0 16.6 19.2 19.6 22.7 23.0 23.6 24.3 25.0 25.3 25.4 25.7 26.1 27.0 27.1 28.3 GE 18000 16.0 16.6 22.7 23.6 24.3 25.0 25.3 25.4 25.7 26.1 27.0 27.1 28.3 19.2 19.6 23.0 GE 16000 16.0 16.6 19.2 19.6 22.7 23.0 23.6 24.3 25.0 25.3 25.4 25.7 26.1 27.0 27.1 28.3 GE 14000 16.0 26.1 16.6 19.2 19.6 22.7 23.0 23.6 24.3 25.0 25.3 25.4 25.7 27.0 27.1 28.3 25.1 25.4 25.7 28.5 GR 12000 16.0 16.6 24.4 25.9 26.3 27.3 19.2 19.7 22.8 23.1 23.7 27.4 GE 10000 17.3 19.8 20.4 23.5 25.1 25.8 26.3 27.0 27.9 29.2 16.6 23.8 24.4 26.1 26.6 28.1 26.7 GR 9000 16.9 17.6 20.1 20.6 23.8 24.2 24.7 25.4 26.1 26.5 26.9 27.4 28.3 28.4 29.5 Œ 8000 17.3 18.1 20.8 21.3 24.5 24.9 25.9 26.6 27.3 27.7 27.9 28.2 28.6 29.5 29.8 30.9 25.7 27.4 28.7 Œ 7000 18.5 21.6 25.3 26.7 28.1 28.5 29.0 29.4 30.3 30.6 31.7 17.6 22.1 Œ 6000 18.1 19.2 22.3 22.9 26.3 26.7 27.8 28.5 29.2 29.6 29.9 30.1 30.6 31.5 31.7 32.8 GR. 5000 18.7 19.7 22.9 23.7 27.4 27.7 28.8 29.6 30.3 30.8 31.0 31.2 31.7 32.6 32.8 34.0 Œ 4500 19.8 20.9 24.3 25.1 28.7 29.1 30.3 31.1 31.8 32.3 32.5 32.7 33.2 34.1 34.3 35.5 36.5 Œ 4000 22.9 24.3 28.8 32.6 34.2 35.1 35.8 36.7 37.2 38.1 38.3 39.5 28.1 33.0 د.36 39.3 Œ 3500 24.9 26.3 30.6 31.4 35.2 35.6 36.8 37.9 38.5 39.1 39.6 40.0 40.9 41.2 42.3 3000 26.1 27.7 32.6 33.4 37.5 38.0 39.3 40.5 41.3 41.8 42.2 42.5 43.0 43.9 44.1 45.3 GE 2500 28.1 29.6 34.7 35.5 39.6 40.0 41.4 42.5 43.4 44.0 44.4 44.7 45.2 46.1 46.3 47.4 50.9 Œ 2000 30.1 31.8 37.6 38.4 42.5 43.0 44.5 45.6 46.5 47.2 47.5 47.9 48.3 49.4 49.6 GR 1800 31.4 33.1 39.0 39.8 44.0 44.5 46.0 47.1 48.0 48.7 49.0 49.4 49.8 50.9 51.1 52.3 Œ 1500 34.5 36.3 43.9 44.8 49.3 49.8 51.4 52.8 53.8 54.5 54.8 55.2 55.6 56.7 56.9 58.2 CE 1200 36.8 38.7 46.9 48.1 52.7 53.5 55.1 56.6 57.6 58.4 58.7 59.1 59.5 60.5 60.8 62.0 Œ 1000 39.6 41.4 49.7 51.0 55.8 58.2 59.7 60.8 61.7 62.1 62.5 62.9 64.0 56.6 64.2 65.5 Œ 900 40.4 42.2 51.0 52.5 57.7 58.5 60.2 61.8 62.9 63.9 64.3 64.7 65.1 66.1 66.4 67.6 Œ 800 41.0 43.0 52.5 54.2 59.9 60.7 62.4 64.4 65.6 66.6 67.0 67.4 67.8 68.9 69.1 70.5 Œ 700 41.7 43.7 53.6 55.5 61.6 64.2 66.7 67.8 69.0 69.4 69.8 70.2 71.3 62.4 71.5 72.9 Œ 600 42.2 44.1 55.0 57.1 63.7 64.9 66.8 69.6 70.7 71.9 72.4 72.7 73.2 74.2 74.5 75.8 Œ 500 42.6 44.6 56.2 58.5 66.0 67.3 69.3 72.1 73.3 74.8 75.4 75.9 76.4 77.4 77.7 79.0 Œ 400 43.2 45.3 57.2 59.7 68.3 69.7 72.2 75.6 77.4 79.1 79.9 80.6 81.1 82.2 82.4 83.8 45.3 60.1 GR 300 43.2 57.4 68.6 73.4 77.4 79.5 81.5 82.7 83.4 85.1 85.3 70.2 83.9 86.9 CER 200 43.2 45.3 57.4 60.1 68.6 70.2 73.5 77.7 80.0 82.1 83.6 84.7 85.5 87.1 88.5 91.3 GR 43.2 45.3 57.4 60.1 77.7 100 68.6 70.2 73.5 80.2 82.3 84.0 85.5 86.5 88.8 91.1 99.5 Œ 000 43.2 45.3 57.4 60.1 68.6 70.2 73.5 77.7 80.2 82.3 84.0 85.5 86.5 88.8 91.1 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATIC	ON NU	MBER:	106070		TO UTC:		MALHADI	ab/geri	ANY		PERIOD MONTH:		ORD: J	AN 80 - 09-11	DEC 89		
• • • • •							• • • • • •	• • • • • • •									• • • • • •
CEILI	4G					1	VISIBIL:	TY IN P	æters								
IN	- 1	GE.	GE	GE	GE	GE	GE	GE	GE	GB	GE	GE	GE	GE	GE	GE	GE
FEET	:	112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
• • • • • •	• • • • •	• • • • • •	• • • • • • •	• • • • • • •	•••••	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • • •	• • • • • •	•••••
NO CE	ու :	13.1	13.6	17.6	18.1	19.9	20.2	20.6	21.2	21.4	21.5	21.8	22.0	22.3	22.5	22.7	23.7
GE 200	, l	13.9	14.5	19.0	19.5	21.8	22.5	22.9	23.6	23.7	23.8	24.2	24.4	24.7	25.0	25.3	26.9
GE 180		13.9	14.5	19.0	19.5	21.8	22.5	22.9	23.6	23.7	23.8	24.2	24.4	24.7	25.0	25.3	26.9
GE 160		13.9	14.5	19.0	19.5	21.8	22.5	22.9	23.6	23.7	23.8	24.2	24.4	24.7	25.0	25.3	26.9
GE 140		13.9	14.5	19.0	19.5	21.8	22.5	22.9	23.6	23.7	23.8	24.2	24.4	24.7	25.0	25.3	26.9
GE 120		14.5	15.1	19.7	20.2	22.6	23.3	24.0	24.6	24.7	24.9	25.2	25.4	25.8	26.0	26.3	27.9
GE 100	000	15.4	16.0	20.9	21.5	23.8	24.5	25.2	25.9	26.0	26.2	26.6	26.8	27.1	27.3	27.7	29.3
GE 90	000	15.6	16.3	21.1	21.7	24.2	24.9	25.5	26.4	26.6	26.8	27.1	27.3	27.7	27.9	28.2	29.8
GE 80	000	16.0	16.8	21.8	22.6	25.2	26.0	26.8	27.8	28.0	28.2	28.7	28.9	29.4	29.6	29.9	31.5
GE 70	000	16.8	17.6	22.8	23.6	26.2	27.1	27.9	29.0	29.3	29.5	29.9	30.2	30.6	30.8	31.2	32.8
GE 60	000	17.1	17.9	23.5	24.3	27.0	27. 9	28.7	29.8	30.1	30.3	30.7	31.0	31.4	31.6	32.0	33.6
GE 50	000	18.1	18.9	24.6	25.4	28.4	29.4	30.2	31.3	31.5	31.8	32.2	32.4	32.9	33.1	33.4	35.0
		19.2	20.0	26.0	27.0	29.9	31.0	31.8	32.9	33.1	33.3	33.8	34.0	34.5	34.7	35.0	36.6
GE 40	000	20.2	21.1	27.6	28.8	31.8	33.1	33.9	35.0	35.3	35.5	35.9	36.2	36.6	36.8	37.2	38.8
GE 35	500 2	21.4	22.3	29.7	31.0	34.4	35.8	36.6	37.9	38.2	38.8	39.2	39.4	39.9	40.1	40.5	42.0
GE 30	000	24.7	25.6	33.6	35.0	38.5	40.0	41.0	42.3	42.7	43.3	43.7	44.0	44.4	44.6	45.0	46.6
GE 25	500 2	26.6	27.5	35.6	37.4	41.1	42.6	43.6	44.9	45.3	46.1	46.6	46.8	47.2	47.5	47.8	49.4
		29.7	30.6	39.3	41.1	44.9	46.4	47.5	49.0	49.5	50.4	51.0	51.2	51.6	51.9	52.2	53.8
		31.1	32.1	41.1	42.9	46.7	48.2	49.3	50.8	51.3	52.2	52.8	53.0	53.4	53.7	54.0	55.6
	1 1	34.6	35.7	45.8	47.6	51.5	53.2	54.4	56.3	56.9	58.1	58.8	59.0	59.4	59.7	60.0	61.6
GE 12	200	36.6	37.7	48.6	50.5	54.6	56.5	57.7	59.7	60.5	61.6	62.3	62.6	63.1	63.3	63.6	65.2
GE 10	000	37.7	38.9	50.6	53.0	57.7	60.0	61.4	63.4	64.4	65.5	66.2	66.6	67.0	67.2	67.6	69.3
		38.3	39.4	51.5	53.9	58.9	61.1	62.6	64.6	65.8	66.9	67.6	67.9	68.4	68.6	68.9	70.6
GE 6	BOO :	38.9	40.1	52.7	55.1	60.3	62.7	64.2	66.4	67.6	68.8	69.5	69.8	70.3	70.5	70.8	72.5
GE 7	700	39.1	40.3	53.6	56.4	61.8	64.3	65.9	68.2	69.5	71.1	71.9	72.2	72.7	72.9	73.2	74.9
GE (500	39.3	40.6	54.2	57.2	63.4	66.0	67.6	70.1	71.5	73.1	74.0	74.5	74.9	75.1	75.5	77.2
GE !	500	40.0	41.4	55.9	59.4	66.0	68.6	70.3	73.0	74.5	76.3	77.4	78.0	78.5	78.8	79.1	80.8
		40.3	41.7	56.6	60.3	67.2	70.2	71.9	74.6	77.1	79.3	80.8	81.5	82.0	82.6	82.9	85.1
		40.6	41.9	56.8	60.6	67.7	71.1	72.9	75.9	78.6	81.2	82.9	83.8	84.6	85.3	85.6	87.9
		40.6	41.9	56.9	60.7	67.8	71.2	73.0	76.3	79.2	81.8	84.2	85.4	86.8	87.9	89.5	94.0
GE :	100	40.6	41.9	56.9	60.7	67.8	71.2	73.0	76.3	79.2	81.8	84.3	85.9	87.3	88.6	90.5	100.0
GE (000	40.6	41.9	56.9	60.7	67.8	71.2	73.0	76.3	79.2	81.8	84.3	85.9	87.3	88.6	90.5	100.0
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TOTAL NUMBER OF OBSERVATIONS 885

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: JAN 80 - DEC 89 STATION NAME: SPANDAHLEM AB/GERMANY STATION NUMBER: 106070 LST TO UTC: - 1 MONTH: NOV HOURS: 12-14 CRILING VISIBILITY IN METERS IN GR GE GR GR GE ge ge GE GE Œ GE GE GE 112 90 48 24 . 20 16 12 10 06 FRET 80 60 40 32 08 04 00 NO CEIL | 16.4 17.2 20.8 21.4 22.3 22.7 22.9 23.6 23.6 23.6 23.6 24.1 24.1 24.2 24.3 24.5 GE 20000 19.0 19.8 27.5 28.0 23.8 24.6 25.9 26.6 26.8 27.5 27.5 27.6 28.0 28.1 28.2 28.5 GE 18000 19.0 19.8 23.8 24.6 25.9 26.6 26.8 27.5 27.5 27.5 27.6 28.0 28.0 28.1 28.2 28.5 GR 16000 19-3 20.1 24.2 25.0 26.2 26.9 27.1 27.8 27.8 27.8 27.9 28.4 28.4 28.5 28.6 28.8 28.6 28.7 28.8 28.9 GE 14000 19.4 27.9 27.9 27.9 28.1 28.1 28.1 20.2 27.0 28.2 28.0 28.5 24.3 25.1 26.3 27.2 28.5 28.9 GE 12000 19.5 20.3 24.4 25.2 26.6 27.2 27.5 28.7 28.7 29.2 21.2 GE 10000 20.5 25.3 26.3 28.2 29.0 29.4 30.2 30.3 30.4 30.5 31.0 31.0 31.1 31.2 31.4 GE 9000 20.8 21.6 26.1 27.2 29.2 30.1 30.4 31.2 31.3 31.4 31.5 32.0 32.0 32.1 32.2 32.4 35.0 23.7 29.8 34.1 GDE 8000 22.8 28.4 31.8 32.7 33.2 34.0 34.2 34.4 34.8 34.8 34.9 35.3 GDE 7000 23.3 24.2 28.8 30.3 32.3 33.2 33.8 34.6 34.7 34.8 34.9 35.4 35.4 35.5 35.6 35.8 Œ 6000 23.7 29.4 30.8 32.9 33.8 35.1 35.3 35.4 35.5 35.9 35.9 36.0 36.2 36.4 24.5 34.4 36.7 GB 5000 24.2 25.1 29.9 31.4 33.4 34.4 34.9 35.7 35.8 35.9 36.0 36.5 36.5 36.6 36.9 Œ 4500 25.0 25.9 30.8 32.3 34.4 35.4 35.9 36.7 36.8 36.9 37.1 37.5 37.5 37.6 37.7 38.0 Œ 4000 26.6 27.5 32.5 34.2 36.4 37.5 38.1 39.0 39.1 39.2 39.3 39.8 39.8 39.9 40.0 40.2 43.6 43.7 44.2 44.3 44.4 GE 3500 29.8 30.8 36.5 38.4 40.7 41.8 42.5 43.4 43.5 44.2 44.6 GTR 3000 33.4 34.7 41.1 43.2 45.8 46.9 47.8 48.7 48.8 48.9 49.0 49.5 49.5 49.6 49.7 49.9 GR 2500 37.5 38.8 46.2 48.4 51.0 52.1 54.0 54.1 54.2 54.4 54.8 54.8 54.9 55.0 53.1 55.3 GE 2000 41.0 42.5 50.6 52.9 55.6 56.7 57.7 58.6 58.8 58.9 59.0 59.4 59.4 59.5 59.7 59.9 Œ 1800 42.1 43.7 52.5 54.8 57.5 58.6 59.7 60.6 60.8 60.9 61.0 61.5 61.5 61.6 61.7 61.9 Œ 1500 45.2 47.0 56.5 58.8 62.9 64.1 65.3 65.6 65.8 65.9 66.3 66.4 66.6 61.5 66.3 66.8 GE 1200 47.6 49.7 59.3 61.8 64.7 66.4 67.6 68.8 69.2 69.3 69.4 69.8 69.8 69.9 70.1 70.3 Œ 1000 i 49.6 51.8 61.9 64.4 68.0 69.9 71.2 72.8 73.1 73.2 73.4 73.9 73.9 74.0 74.1 74.5 GE 900 Ì 49.9 52.1 62.7 65.5 69.4 71.4 72.8 74.4 74.7 74.8 75.1 75.6 75.6 75.7 75.8 76.2

TOTAL NUMBER OF OBSERVATIONS 885

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GR 000 52.5 55.0 67.7 71.1 76.4 80.2 82.8 85.8 87.8 90.1 91.8 92.9 94.0 94.9 95.5 100.0

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81.8

84.9

89.5

92.2

93.8

94.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION MAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 MONTH: NOV HOURS: 15-17 LST TO UTC: - 1 CEILING VISIBILITY IN METERS GE GR TN Œ CE æ GE. CR æ CIR. GE GE. GR CR GR CR GR FRET 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 29.0 29.0 29.0 29.2 NO CRIL 21.4 22.6 25.6 26.4 28.8 28.9 29.0 29.2 29.2 29.2 29.3 29.6 GB 20000 23.7 25.2 28.8 29.6 32.4 32.5 32.7 32.7 32.7 32.7 32.8 32.8 32.8 32.9 33.2 32.8 32.8 32.9 GR 18000 23.8 25.3 28.9 29.7 32.5 32.8 32.8 32.9 32.9 32.9 33.0 33.3 32.7 **GE 16000** 23.8 25.3 28.9 29.7 32.5 32.7 32.8 32.8 32.8 32.8 32.9 32.9 32.9 32.9 33.0 33.3 GE 14000 24.0 32.9 32.9 32.9 32.9 33.0 33.0 33.0 33.0 33.1 25.4 29.0 29.8 32.7 32.8 33.4 GR 12000 24.1 25.5 29.2 29.9 33.1 33.2 33.3 33.3 33.3 33.3 33.4 33.4 33.4 33.4 33.6 33.9 36.2 GR 10000 25.8 27.2 32.0 35.6 36.2 36.2 36.2 36.3 36.3 36.3 36.4 31.2 35.9 36.3 36.7 GE 9000 26.2 27.7 31.6 32.4 36.0 36.4 36.9 36.9 36.9 36.9 37.1 37.1 37.1 37.1 37.2 37.5 GE 8000 27.5 34.2 38.1 38.5 39.1 39.1 39.1 39.1 39.2 39.2 39.2 39.2 39.3 29.0 33.3 39.7 GE 7000 27.9 29.5 33.8 34.7 39.0 39.4 40.0 40.0 40.0 40.0 40.1 40.1 40.1 40.1 40.2 40.6 GE 6000 28.5 30.1 34.4 35.4 39.7 40.1 40.7 40.7 40.7 40.7 40.8 40.8 40.8 40.8 40.9 41.2 GE 5000 29.4 31.0 35.6 36.8 41.1 41.6 42.1 42.1 42.1 42.1 42.3 42.3 42.3 42.3 42.4 42.7 GE 4500 29.8 31.4 36.3 37.5 41.9 42.4 42.9 42.9 42.9 42.9 43.1 43.1 43.1 43.1 43.2 43.5 40.5 46.1 GE 4000 46.1 32.2 34.1 39.2 45.0 45.5 46.1 46.1 46.2 46.2 46.2 46.2 46.3 46.7 GE 3500 35.6 37.9 44.0 45.2 49.8 50.5 51.1 51.1 51.1 51.1 51.2 51.2 51.2 51.2 51.3 51.6 GE 57.1 57.1 57.1 57.2 3000 40.6 42.9 49.6 50.8 55.8 56.5 57.1 57.2 57.2 57.2 57.3 57.6 GE 2500 43.4 45.8 52.7 53.9 59.1 59.9 60.5 60.5 60.5 60.5 60.6 60.6 60.6 60.6 60.7 61.0 GE 2000 47.B 64.9 66.6 66.6 66.6 66.7 66.7 66.7 66.7 66.8 50.2 58.1 59.4 65.6 66.6 67.1 GE 1800 48.6 51.3 59.5 60.9 66.3 67.1 68.0 68.0 68.0 68.1 68.1 68.1 68.1 68.2 68.0 68.6 GΕ 1500 65.2 70.7 72.9 73.0 73.1 73.2 73.2 73.2 73.2 73.3 51.3 54.5 63.8 71.6 72.7 73.7 GE 1200 52.2 55.5 65.5 67.7 73.4 74.5 75.6 75.9 76.0 76.2 76.3 76.3 76.3 76.3 76.4 76.7 GE 67.3 69.5 78.1 78.4 78.5 78.6 78.8 78.8 78.8 78.9 78.9 1000 53.3 56.8 75.8 76.9 79.2 GE 900 53.7 57.2 68.4 70.7 77.2 78.5 79.7 80.0 80.1 80.2 80.3 80.3 80.3 80.3 80.5 80.8 GE 800 53.8 57.3 68.7 71.1 77.6 79.1 80.2 80.6 30.7 80.8 80.9 80.9 80.9 80.9 81.0 81.4 GR 700 54.8 58.4 70.6 73.1 80.0 81.6 82.9 83.4 83.5 83.8 84.0 84.0 84.0 84.0 84.1 84.4 GE 600 54.9 58.5 71.0 73.4 80.6 82.6 84.0 84.5 84.6 85.1 85.2 85.3 85.3 85.3 85.4 85.8 55.4 GE 500 59.0 71.9 74.5 82.3 86.7 86.9 87.7 87.9 88.0 88.0 84.4 85.8 88.1 88.5 GE 400 55.5 59.1 72.2 74.9 83.4 85.6 87.6 88.7 89.8 90.7 91.1 91.3 91.5 91.8 91.9 92.2 GR 300 55.5 59.1 72.3 75.1 83.7 86.0 88.0 89.3 90.7 91.9 92.5 93.0 93.2 93.4 93.6 93.9 97.2 GE 200 55.5 59.1 72.3 75.1 83.7 86.0 88.0 89.3 90.8 92.5 93.3 93.9 94.5 95.1 95.9 89.4 GR 100 55.5 59.1 72.3 75.1 83.7 86.0 88.0 91.0 92.7 93.4 94.2 94.9 95.7 97.1 100.0 GE 000 55.5 59.1 72.3 75.1 83.7 86.0 88.0 89.4 91.0 92.7 93.4 94.2 94.9 95.7 97.1 100.0

TOTAL NUMBER OF OBSERVATIONS 885

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: NOV HOURS: 18-20 CEILING VISIBILITY IN METERS GE GE GE GE Œ GE GE GE Œ TN GE GE GR GE GE GE GE FEET 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 32.4 MO CEIL 25.0 26.6 28.2 29.7 30.8 31.2 31.6 31.8 31.9 31.9 32.7 32.7 32.7 32.8 GR 20000 26.5 28.1 30.2 31.7 33.0 33.4 33.8 34.0 34.3 34.3 34.8 35.1 35.1 35.1 35.2 35.2 GE 18000 26.6 28.2 30.3 31.8 33.1 33.5 33.9 34.1 34.4 34.4 34.9 35.2 35.2 35.2 35.4 35.4 GE 16000 26.6 28.2 30.3 31.8 33.1 33.5 33.9 34.1 34.4 34.4 34.9 35.2 35.2 35.2 35.4 35.4 34.9 GE 14000 26.6 28.2 30.3 31.8 33.1 33.5 33.9 34.1 34.4 34.4 35.2 35.2 35.2 35.4 GE 12000 26.8 28.4 34.3 35.1 35.5 30.4 31.9 33.3 34.1 34.7 34.7 35.5 35.5 35.6 35.6 33.8 37.4 27.6 34.8 35.9 36.3 36.6 37.1 37.4 37.4 37.5 **GE 10000** 29.4 31.5 33.2 35.4 36.6 36.7 37.1 GE 9000 28.0 29.9 31.9 33.6 35.2 35.8 36.4 37.1 37.5 37.9 37.9 37.9 38.0 38.0 GE 8000 31.2 33.2 35.6 37.4 39.6 40.4 41.0 41.3 41.7 41.7 42.1 42.5 42.5 42.5 42.6 42.6 7000 40.3 41.7 42.0 42.8 43.2 43.2 43.3 Œ 31.7 33.6 36.1 37.9 41.1 42.4 42.4 43.2 43.3 Œ 6000 32.0 34.0 36.4 38.2 40.6 41.4 42.0 42.4 42.7 42.7 43.2 43.5 43.5 43.5 43.6 43.6 GB 5000 32.8 34.8 37.3 39.3 41.7 42.5 43.1 43.4 43.7 43.7 44.2 44.5 44.5 44.5 44.7 44.7 Œ 4500 33.6 35.7 38.8 40.8 43.2 44.0 44.9 45.2 45.6 45.6 46.0 46.4 46.4 46.4 46.5 46.5 GE 4000 37.1 39.2 44.3 46.8 48.9 49.3 49.3 49.7 50.1 50.1 50.1 42.4 47.6 .8.6 50.2 50.2 GR 3500 41.1 43.2 46.4 48.3 51.2 52.2 53.2 53.5 53.8 53.8 54.3 54.6 54.6 54.6 54.8 54.8 Œ 3000 44.8 47.0 50.5 52.5 55.5 56.5 57.5 57.9 58.2 58.7 59.0 59.0 59.0 59.1 GE 2500 46.3 48.5 52.2 54.3 57.3 58.3 59.4 59.8 60.2 60.2 60.6 61.0 61.0 61.0 61.1 Œ 2000 51.3 53.5 57.6 59.7 62.8 63.8 64.9 65.3 65.7 65.7 66.1 66.5 66.5 66.5 66.6 66.6 GE 1800 65.8 67.4 51.9 54.4 60.6 63.7 66.2 66.6 66.6 67.0 67.4 67.4 67.5 58.6 64.8 67.5 GE 1500 56.0 58.7 63.7 65.9 69.1 70.1 71.2 71.6 72.1 72.4 72.9 73.2 73.2 73.2 73.4 73.4 57.3 Œ 1200 59.9 65.9 68.3 71.6 72.7 73.8 74.3 74.7 75.1 75.7 76.1 76.1 76.2 76.1 76.2 GR 1000 58.2 60.8 67.4 69.8 73.7 75.0 76.1 76.6 77.0 77.4 78.1 78.5 78.5 78.5 78.6 78.6 Œ 900 59.1 61.8 69.1 71.6 75.5 78.0 78.4 78.9 79.2 79.9 80.4 80.4 80.5 76.8 80.4 80.5 CR 800 59.1 61.8 69.2 72.0 75.9 77.3 78.4 78.9 79.6 79.9 80.6 81.1 81.1 81.1 81.2 Œ 700 60.2 62.9 71.3 74.3 78.5 79.9 81.5 82.2 82.8 83.5 83.9 83.9 83.9 84.0 81.1 84.0 GR 600 60.5 63.3 72.4 75.4 80.0 81.7 83.1 83.7 84.4 85.1 85.8 86.2 86.2 86.2 86.3 86.3 Œ 84.7 87.5 90.2 500 61.5 64.3 74.4 77.5 82.5 86.1 86.8 88.5 89.2 89.9 90.2 90.4 90.4 GE 400 61.7 64.4 74.9 78.0 83.4 85.5 87.0 97.9 88.7 89.8 90.8 91.5 92.0 92.2 92.3 92.3 Œ 300 61.7 64.4 74.9 83.6 87.5 88.9 92.4 93.8 78.1 85.9 89.9 91.0 93.1 93.6 93.9 93.9 GE 200 61.7 64.4 74.9 78.2 83.7 86.0 87.8 89.3 90.4 91.7 93.2 94.1 95.4 96.0 96.7 97.6 GE 100 61.7 64.4 74.9 78.2 83.8 86.1 87.9 89.4 90.6 92.0 93.5 94.5 95.9 96.9 97.6 100.0 GE 000 61.7 64.4 74.9 78.2 83.8 86.1 87.9 89.4 90.6 92.0 93.5 94.5 95.9 96.9 97.6 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: NOV HOURS: 21-23 VISIBILITY IN METERS CEILING GE GE GE GE Œ IN GR GR GE GR GE Œ GE Œ Œ GR GE FEET 112 90 80 60 48 40 32 24 20 16 12 10 80 06 04 00 NO CEIL 24.3 25.5 28.0 28.6 29.9 30.6 30.7 30.9 31.1 31.3 31.4 31.4 31.5 32.2 29.6 32.6 GE 20000 25.8 27.0 29.8 30.3 31.5 31.7 32.4 32.5 32.9 33.1 33.2 33.3 33.3 33.4 34.1 34.6 **GE 18000** 25.8 27.0 29.8 30.3 31.7 32.4 32.5 32.9 33.1 33.2 33.3 33.3 33.4 34.1 31.5 34.6 GR 16000 25.8 27.0 29.8 30.3 31.5 31.7 32.4 32.5 32.9 33.1 33.2 33.3 33.3 33.4 34.1 34.6 GE 14000 25.8 27.0 29.8 30.3 31.5 31.7 32.4 32.5 32.9 33.1 33.2 33.3 33.3 33.4 34.1 34.6 GE 12000 26.1 27.2 32.6 32.8 33.1 33.3 33.4 33.6 30.0 30.6 31.7 31.9 33.6 33.7 34.4 34.8 GE 10000 28.0 33.8 34.5 34.7 35.1 35.4 35.5 35.6 35.6 35.8 36.4 26.9 31.0 31.8 33.6 36.9 GE 9000 35.2 35.5 35.9 36.0 36.1 36.9 27.3 28.5 31.5 32.3 34.0 34.3 34.9 36.1 36.2 37.4 GE 8000 30.0 31.4 34.5 35.3 37.4 37.6 38.3 38.5 38.9 39.2 39.3 39.4 39.4 39.6 40.3 40.7 GE 7000 38.8 39.0 39.3 39.7 39.8 39.9 40.7 30.4 31.8 34.9 35.8 37.8 38.1 39.9 40.0 41.2 GE 6000 30.8 32.2 35.3 36.1 38.2 38.4 39.1 39.3 39.7 40.0 40.1 40.3 40.3 40.4 41.1 41.5 GE 5000 32.4 33.8 36.9 37.7 39.8 40.0 40.7 40.9 41.3 41.6 41.8 41.9 41.9 42.0 42.7 43.1 GE 4500 33.4 34.8 38.3 39.1 41.2 41.4 42.1 42.3 42.7 43.4 43.5 43.6 43.6 43.7 44.4 44.9 GE 4000 37.8 45.1 45.3 45.7 36.4 41.3 42.1 44.4 46.4 46.5 46.6 46.6 47.4 44.2 46.7 47.9 GE 3500 39.7 41.3 44.8 45.8 47.9 48.1 48.8 49.0 49.4 50.1 50.2 50.3 50.3 50.4 51.1 51.6 GE 3000 43.0 45.0 48.6 49.6 52.6 52.9 53.3 54.0 54.1 54.2 54.2 55.0 51.7 51.9 54.3 55.5 GE 2500 43.6 45.6 49.5 50.5 52.6 52.8 53.5 53.9 54.2 54.9 55.0 55.1 55.1 55.2 55.9 56.4 **GE 2000** 47.8 49.7 54.2 55.2 57.7 57.9 58.6 59.1 59.4 60.1 60.2 60.3 60.3 60.4 61.1 61.6 GE 1800 49.3 51.2 55.7 56.7 59.2 59.4 60.1 60.6 60.9 61.6 61.7 61.8 61.8 61.9 62.6 63.1 GE 1500 52.7 54.7 60.0 61.2 64.1 64.4 65.1 65.6 66.0 66.8 66.9 67.0 67.0 67.1 67.8 68.3 GE 1200 54.6 56.5 62.5 64.0 67.4 67.6 68.3 68.9 69.2 70.0 70.1 70.2 70.2 70.4 71.0 71.5 GE 1000 55.8 57.8 64.4 66.0 69.7 70.0 70.7 71.3 71.9 72.7 72.8 72.9 72.9 73.0 73.7 74.2 900 57.1 59.2 68.2 74.0 74.6 75.4 75.8 GE 66.6 72.1 72.4 73.5 76.0 76.0 76.1 76.8 77.3 GE 800 58.0 60.1 68.2 70.0 74.2 74.5 75.7 76.2 76.9 77.7 78.1 78.3 78.3 78.4 79.1 79.6 GE 700 59.3 78.4 80.6 61.4 69.6 71.6 76.2 76.6 77.7 79.1 80.2 80.9 80.9 81.0 81.7 82.1 GE 600 60.6 62.6 71.2 73.4 78.1 79.1 80.4 81.1 81.8 82.9 83.4 83.6 83.6 83.7 84.4 84.9 GE 87.1 500 61.1 63.2 72.4 75.0 80.0 81.1 82.4 83.4 84.3 85.6 86.0 86.3 86.3 86.4 87.5 GE 400 61.6 63.7 73.1 76.1 81.7 82.8 84.1 85.2 86.2 87.4 87.9 88.5 88.5 88.8 89.5 90.1 300 86.4 87.3 89.5 GE 61.7 63.8 73.2 76.2 81.9 83.0 84.8 88.7 90.1 90.3 91.6 90.8 92.2 GE 200 61.7 63.8 73.2 76.2 81.9 83.0 84.8 86.9 87.8 89.4 90.3 91.1 91.9 92.8 94.5 96.2 GE 100 61.7 63.8 73.2 76.2 83.0 84.9 87.2 88.4 90.0 90.9 91.7 92.5 96.0 81.9 93.5 99.8 GE 000 61.7 63.8 73.2 76.2 81.9 83.0 84.9 87.2 88.4 90.0 90.9 91.7 92.5 93.7 96.2 100.0

TOTAL NUMBER OF OBSERVATIONS 867

D - 2 - 98

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: NOV HOURS: ALL

				LST	TO UTC	: - 1					MONTH:	NOV HO	URB: AL	6			
CEI	LING	•••••	•••••	•••••	• • • • • • •	••••••	VISIBIL	ITY IN	METERS	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • •	•••••
1	n j	GE	GE.	GE	GE	GE	GE	GE	GE	GE	GR	GE	GE	GE	Œ	GE	Œ
FE	et	112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
•••		· • • • • • • • • • • • • • • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •		• • • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • •	•••••
NO	CEIL	19.1	20.2	22.9	23.6	25.3	25.6	26.0	26.5	26.7	27.0	27.2	27.4	27.5	27.8	28.0	28.6
GE	20000	20.7	21.8	24.8	25.6	27.6	28.0	28.4	28.9	29.3	29.5	29.7	29.9	30.2	30.4	30.7	31.4
Œ	18000	20.7	21.8	24.9	25.7	27.6	28.0	28.5	29.0	29.3	29.5	29.8	29.9	30.2	30.5	30.8	31.4
Œ	16000	20.8	21.8	24.9	25.7	27.6	28.1	28.5	29.0	29.3	29.5	29.8	30.0	30.2	30.5	30.8	31.5
Œ	14000	20.8	21.9	24.9	25.7	27.7	28.1	28.5	29.0	29.4	29.6	29.8	30.0	30.3	30.5	30.8	31.5
Œ	12000	20.9	22.0	25.1	26.0	28.0	28.4	28.9	29.4	29.7	29.9	30.2	30.4	30.7	30.9	31.2	31.9
GE	10000	21.8	22.9	26.2	27.2	29.5	30.0	30.5	31.0	31.4	31.7	31.9	32.1	32.4	32.6	32.9	33.6
Œ	9000	22.3	23.4	26.7	27.8	30.1	30.6	31.1	31.7	32.0	32.3	32.6	32.8	33.0	33.3	33.6	34.3
Œ	8000	23.8	25.0	28.6	29.7	32.1	32.7	33.4	34.0	34.4	34.6	35.0	35.1	35.4	35.7	36.0	36.6
Œ	7000	24.2	25.4	29.0	30.2	32.7	33.3	34.0	34.6	35.0	35.2	35.6	35.7	36.0	36.3	36.6	37.2
GE	6000	24.6	25.8	29.5	30.7	33.3	33.9	34.6	35.2	35.6	35.8	36.2	36.3	36.6	36.9	37.2	37.8
GE	5000	25.3	26.6	30.4	31.7	34.3	35.0	35.7	36.3	36.6	36.9	37.2	37.4	37.7	38.0	38.3	38.9
Œ	4500	26.4	27.7	31.7	33.0	35.7	36.3	37.1	37.7	38.1	38.4	38.7	38.9	39.2	39.5	39.8	40.4
Œ	4000	29.2	30.6	34.8	36.1	38.9	39.6	40.4	41.0	41.4	41.7	42.1	42.3	42.5	42.8	43.1	43.8
GE	3500	31.8	33.4	38.0	39.4	42.4	43.2	44.0	44.6	45.1	45.5	45.8	46.0	46.3	46.6	46.9	47.5
GE	3000	34.7	36.4	41.5	42.9	46.1	46.9	47.8	48.5	48.9	49.4	49.7	49.9	50.2	50.4	50.7	51.4
GE	2500	36.6	38.3	43.7	45.3	48.5	49.3	50.2	50.9	51.4	51.9	52.2	52.4	52.7	53.0	53.3	53.9
GE	2000	40.1	41.9	48.1	49.7	53.0	53.8	54.8	55.6	56.0	56.5	56.9	57.1	57.4	57.7	58.0	58.7
GE	1800	41.4	43.3	49.6	51.2	54.6	55.4	56.4	57.2	57.7	58.2	58.6	58.8	59.0	59.3	59.6	60.3
Œ	1500	44.4	46.4	53.7	55.4	59.0	59.9	61.0	62.0	62.6	63.2	63.5	63.7	64.0	64.3	64.6	65.3
GE	1200	46.7	48.8	56.7	58.7	62.5	63.5	64.7	65.7	66.4	67.0	67.4	67.6	67.9	68.2	68.5	69.2
_	1000	40.7	50.0														
Œ	1000 900	48.7	50.9	59.2	61.3	65.6	66.8	68.0	69.2	69.9	70.5	71.0	71.2	71.5	71.8	72.1	72.8
GE GE	800	49.6 50.2	51.7	60.6	62.8	67.3	68.5 70.0	69.9	71.1	71.9	72.5	73.0	73.2 75.0	73.5 75.3	73.8	74.1	74.8
GE	700	51.1	52.4 53.3	61.8 63.2	64.1 65.6	68.7 70.6	70.0	71.4 73.5	72.7 75.0	73.6 76.0	74.2 76.8	74.7 77.3	77.6	77.9	75.6 78.2	75.9 78.5	76.6 79.2
GE	600	51.6	53.9	64.3	66.8	70.6	74.0	75.8	77.4	78.3	79.2	77.3	80.0	80.3	80.6	80.9	81.7
GE.	000	31.0	33.5	04.3	00.0	14.2	/4.0	73.6	//.4	70.3	19.2	79.0	80.0	80.3	80.6	00.9	61.7
GE	500	52.3	54.7	65.7	68.5	74.3	76.3	78.1	80.0	81.0	82.1	82.7	83.1	83.4	83.7	84.0	84.8
GB	400	52.7	55.1	66.4	69.4	75.8	77.9	80.1	82.3	83.8	85.1	85.9	86.4	86.8	87.2	87.5	88.3
Œ	300	52.8	55.1	66.6	69.6	76.2	76.5	81.0	83.5	85.2	86.8	87.9	88.5	89.1	89.6	90.0	90.9
GE	200	52.8	55.1	66.6	69.7	76.2	78.6	81.2	83.8	85.7	87.5	88.9	89.7	90.7	91.7	93.0	95.1
Œ	100	52.8	55.1	66.6	69.7	76.2	78.6	81.2	84.0	85.9	87.7	89.2	90.2	91.3	92.6	94.4	99.8
Œ	000	52.8	55.1	66.6	69.7	76.2	78.6	81.2	84.0	85.9	87.7	89.2	90.2	91.3	92.7	94.5	100.0
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PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: DEC HOURS: 00-02 CEILING VISIBILITY IN METERS IN GR GE GE GE GR GE GE GE Œ GE GE GE GE GR Œ FEET 112 48 90 80 60 40 32 24 20 16 12 10 08 06 04 NO CRIL | 17.6 17.8 19.9 20.0 21.0 21.4 21.6 21.8 21.8 22.0 22.2 22.4 22.5 22.5 22.5 22.5 20.8 20.9 22.3 22.8 23.1 GE 20000 18.5 18.8 23.4 23.4 23.6 23.8 24.0 24.1 24.1 24.1 GE 18000 18.5 18.8 20.8 20.9 22.3 22.8 23.1 23.4 23.4 23.6 24.0 24.1 23.8 24.1 24.1 24.1 GE 16000 18.5 18.8 20.8 20.9 22.3 22.8 23.1 23.4 23.4 23.6 23.8 24.0 24.1 24.1 24.1 24.1 24.1 24.1 24.1 24.1 GE 14000 18.5 18.8 20.8 20.9 22.3 22.8 23.1 23.4 23.4 23.6 23.8 24.0 24.1 24.1 GE 12000 18.5 20.9 22.3 20.3 18.8 22.8 23.1 23.4 23.4 23.6 23.8 24.0 24.1 23.3 GE 10000 18.9 19.1 21.3 21.4 22.7 23.5 23.9 23.9 24.1 24.2 24.4 24.5 24.5 24.5 GE 9000 19.0 19.2 21.5 21.6 23.0 23.5 23.8 24.1 24.1 24.3 24.4 24.8 24.8 24.7 24.8

24.1 24.5 24.8 24.8 25.3 25.6 25.9 GE 8000 20.5 20.7 23.2 23.3 25.9 26.1 26.3 26.5 26.6 26.6 26.6 26.6 GE 7000 20.5 20.7 23.3 23.6 25.2 25.8 26.0 26.4 26.4 26.6 26.7 26.9 27.0 27.0 27.0 27.0 GE 6000 20.5 20.7 23.3 23.6 25.2 25.8 26.0 26.4 26.4 26.6 26.7 26.9 27.0 27.0 27.0 27.0 26.8 27.2 27.2 27.5 27.7 GE 5000 20.9 21.1 24.0 24.4 26.0 26.6 27.4 27.8 27.8 27.8 27.8 GE 4500 27.4 28.0 28.2 28.5 28.5 28.8 29.2 22.3 22.5 25.3 25.8 28.9 29.1 29.2 29.2 29.2 GE 4000 23.5 23.8 26.7 27.2 28.8 29.4 29.7 30.0 30.0 30.2 30.3 30.6 30.7 30.7 30.7 30.7 GE 3500 25.1 25.3 28.9 29.3 30.9 31.6 31.8 32.2 32.2 32.4 32.5 32.7 32.8 32.8 32.8 32.8 GE 3000 28.6 28.9 32.6 33.2 34.8 35.7 36.0 36.4 36.4 36.6 36.7 36.9 37.0 37.0 37.0 37.0 GE 2500 30.1 30.3 34.3 35.0 36.6 37.5 37.8 38.2 38.2 38.4 38.5 38.8 38.9 38.9 38.9 38.9 GR 2000 33.9 34.1 38.5 39.2 41.0 41.9 42.3 42.6 42.6 43.0 43.1 43.3 43.5 43.5 43.5 43.5 GE 1800 36.5 36.7 41.3 42.0 43.9 45.2 45.6 45.6 45.9 46.3 46.5 44.9 46.0 46.5 46.5 46.5 GE 1500 40.9 41.3 46.1 47.3 49.3 50.3 50.7 51.0 51.0 51.7 51.8 52.0 52.3 52.3 52.3 52.3 GE 1200 43.8 44.5 49.8 51.0 53.4 54.4 54.8 55.1 55.1 55.8 55.9 56.1 56.4 56.4 56.4 56.4 GE 1000 46.4 47.2 53.4 54.8 57.2 58.3 58.6 59.0 59.2 59.9 60.0 60.2 60.5 60.5 60.5 60.5 49.0 59.9 62.0 62.7 GE 900 48.2 55.6 57.4 61.1 61.5 61.8 62.8 63.1 63.3 63.3 63.3 63.3 64.9 63.6 66.0 GE 800 48.8 49.5 56.7 58.6 61.5 62.7 63.1 64.3 64.4 64.7 64.9 63.4 64.9 64.9 GR 700 50.0 50.8 58.4 60.5 63.4 65.1 65.5 65.8 66.7 66.8 67.0 67.3 67.3 67.3 67.3 600 50.8 51.7 60.1 62.4 66.4 68.4 69.2 69.5 69.8 70.5 70.7 70.9 71.1 71.1 71.1 71.1 GE 500 51.7 52.6 61.5 64.1 69.5 71.8 73.4 73.9 74.5 75.3 75.7 75.9 76.1 76.1 76.1 76.1 GR 400 52.5 53.4 63.2 65.9 72.0 76.9 77.4 79.9 80.5 75.2 78.2 79.3 80.1 80.5 80.5 80.5 GR 300 53.0 53.9 63.6 66.4 73.1 76.4 78.6 79.4 80.3 81.6 82.4 82.8 83.2 83.4 83.6 83.6 200 GE 53.0 53.9 63.8 66.5 73.3 76.6 79.3 80.2 81.4 83.2 84.8 86.0 86.9 89.0 89.5 90.3 GR 1001 53.0 53.9 63.8 66.5 73.3 76.6 79.3 80.2 81.5 83.4 85.1 86.5 88.0 90.2 92.8 99.0

TOTAL NUMBER OF OBSERVATIONS 880

D - 2 - 100

GE 000 53.0 53.9 63.8 66.5 73.3 76.6 79.3 80.2 81.5 83.4 85.1 86.6 88.1 90.5 93.1 100.0

GE

00

24.1

OPERATING LOCATION "A" PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY USAFETAC, ASHEVILLE NC PROM BOILDY ORGANIA

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

				lst	TO UTC	: - 1					MONTH:	DEC	HOURS:	03-05			
••••	• • • • •	• • • • •	• • • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •
	LING						VISIBIL										_
I		GE	GZE	GE	GE	GB	GE	GE	GE	GE	GE	GE	GE.	GE	Œ	GE	Œ
PEI	er	112	90	80	60	48	40	32	24	20	16	12	10	80	06	04	00
••••	•••••	• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •
NO 0	TRIT.	13.0	13.5	15.7	16.0	16.7	17.5	17.7	18.2	18.2	18.4	18.4	18.5	18.5	18.6	18.6	18.6
		13.0	13.3	13.7	10.0	10.7	17.5	1,.,	20.2	10.2	10.4	10.4	10.5	10.5	10.0	10.0	10.0
CIR 2	20000	13.8	14.6	16.9	17.4	18.2	19.0	19.2	19.6	19.8	20.0	20.0	20.1	20.1	20.2	20.2	20.2
	18000	13.8	14.6	16.9	17.4	18.2	19.0	19.2	19.6	19.8	20.0	20.0	20.1	20.1	20.2	20.2	20.2
	16000	13.8	14.6	16.9	17.4	18.2	19.0	19.2	19.6	19.8	20.0	20.0	20.1	20.1	20.2	20.2	20.2
GE 1	14000	13.8	14.6	16.9	17.4	18.2	19.0	19.2	19.6	19.8	20.0	20.0	20.1	20.1	20.2	20.2	20.2
GE 1	12000	13.8	14.6	17.2	17.6	18.4	19.2	19.4	19.9	20.0	20.2	20.2	20.3	20.3	20.4	20.4	20.4
	ļ																
GE 1	10000	13.9	14.7	17.5	18.1	18.8	19.6	19.9	20.4	20.5	20.8	20.8	20.9	20.9	21.0	21.0	21.0
Œ	9000	14.1	14.9	17.7	18.3	19.1	19.9	20.1	20.7	20.8	21.0	21.0	21.1	21.1	21.2	21.2	21.2
Œ	8000	15.2	16.0	18.8	19.4	20.2	21.0	21.2	21.8	21.9	22.1	22.1	22.2	22.2	22.3	22.3	22.3
Œ	7000	15.6	16.4	19.8	20.3	21.1	21.9	22.1	22.7	22.8	23.0	23.0	23.1	23.1	23.3	23.3	23.3
Œ	6000	15.6	16.4	19.8	20.3	21.1	21.9	22.1	22.7	22.8	23.0	23.0	23.1	23.1	23.3	23.3	23.3
	Į																
GE.	5000	16.1	16.9	20.3	20.9	21.7	22.5	22.7	23.3	23.4	23.6	23.6	23.7	23.7	23.8	23.8	23.8
Œ	4500	17.0	17.8	21.2	21.8	22.6	23.4	23.6	24.2	24.3	24.5	24.5	24.6	24.6	24.7	24.7	24.7
GE	4000	19.2	20.1	23.6	24.5	25.6	26.4	26.6	27.2	27.3	27.5	27.5	27.7	27.7	27.8	27.8	27.8
GE	3500	21.3	22.2	25.7	26.7	28.0	28.8	29.0	29.6	29.7	29.9	29.9	30.0	30.0	30.1	30.1	30.1
Œ	3000	25.1	26.3	30.1	31.3	32.8	33.6	34.0	34.5	34.7	34.9	34.9	35.0	35.0	35.1	35.1	35.1
		i															
Œ	2500	26.7	28.1	32.2	33.3	35.0	35.8	36.1	36.7	36.8	37.0	37.0	37.1	37.1	37.2	37.2	37.2
Œ	2000	30.2	31.7	35.9	37.4	39.1	39.8	40.2	40.7	40.9	41.2	41.3	41.4	41.4	41.5	41.5	41.5
GE	1800	32.1	33.5	37.7	39.2	41.1	41.9	42.3	42.9	43.0	43.3	43.5	43.6	43.7	43.8	43.8	43.8
Œ	1500	35.9	37.5	42.1	43.6	45.5	46.3	46.7	47.3	47.4	48.0	48.1	48.2	48.3	48.4	48.4	48.4
GE	1200	37.9	39.6	44.5	45.9	48.3	49.1	49.5	50.2	50.3	50.9	51.0	51.1	51.2	51.4	51.4	51.4
GE	1000	40.7	42.7	48.1	49.7	52.3	53.0	53.7	54.4	54.5	55.1	55.2	55.3	55.4	55.5	55.5	55.5
GE	900	43.7	45.8	51.6	53.3	56.1	57.0	57.7	58.4	58.5	59.0	59.1	59.3	59.4	59.5	59.5	59.5
GE	800	44.7	47.0	52.8	55.2	58.4	59.4	60.0	60.8	60.9	61.5	61.9	62.0	62.1	62.2	62.2	62.2
GE	700	46.0	48.3	54.6	57.2	60.6	61.9	63.0	63.8	63.9	64.7	65.0	65.1	65.2	65.3	65.3	65.3
GE	600	46.6	48.9	55.5	58.2	62.3	63.8	65.2	66.0	66.3	67.2	67.5	67.6	67.7	67.8	67.8	67.8
			*****	33.3	30.2	02.5	03.0	03.2	00.0	00.5	0	0	•	• • • • • • • • • • • • • • • • • • • •	00		0,.0
GE	500	47.5	49.8	57.3	60.8	66.0	67.6	69.6	71.0	71.3	72.2	72.6	72.7	72.9	73.0	73.0	73.0
GE	400	48.2	50.5	58.5	62.2	68.2	70.4	72.7	74.5	74.8	76.2	76.7	77.0	77.3	77.4	77.4	77.4
GE	300	48.2	50.5	58.9	63.0	69.4	72.1	74.6	76.9	77.4	79.2	80.2	80.9	81.3	81.4	81.6	82.1
GE	200	48.2	50.5	58.9	63.0	69.9	72.6	75.2	78.2	79.0	81.5	83.1	85.0	86.2	87.9	88.5	89.6
Œ	100	48.2	50.5	58.9	63.0	69.9	72.6	75.3	78.3	79.2	81.7	83.4	86.0	87.7	90.7	92.6	98.9
CE	000	48.2	50.5	58.9	63.0	69.9	72.6	75.3	78.6	79.5	81.9	83.6	86.2	87.9	91.1	92.9	100.0
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TOTAL NUMBER OF OBSERVATIONS 886

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: DEC HOURS: 06-08 VISIBILITY IN METERS CEILING GE GE GE GE Œ GE IN GE GE GE GE GE GE GE GR GE GR FEET 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 12.3 12.7 13.6 13.8 15.0 15.8 16.0 16.5 16.5 16.6 16.7 16.8 16.8 17.0 17.0 17.2 GE 20000 13.3 13.7 14.8 15.2 16.5 17.4 17.6 18.0 18.0 18.2 18.3 18.4 18.4 18.6 18.6 18.9 GE 18000 13.3 13.7 15.2 17.4 17.6 18.0 18.0 18.2 18.3 18.4 18.4 14.8 16.5 18.6 18.6 18.9 GR 16000 13.3 13.7 14.8 15.2 16.5 17.4 17.6 18.0 18.0 18.2 18.3 18.4 18.4 18.6 18.6 18.9 18.2 GE 14000 13.3 13.7 14.8 15.2 16.5 17.4 17.6 18.0 18.0 18.3 18.4 18.4 18.6 18.6 18.9 GR 12000 13.6 15.0 17.8 18.3 18.3 18.4 13.9 15.5 16.7 17.6 18.5 18.6 18.6 18.8 18.8 19.2 GE 10000 13.8 14.1 15.2 15.7 16.9 17.8 18.0 18.5 18.5 18.6 18.7 18.8 18.8 19.1 19.1 19.4 GE 9000 13.9 18.7 14.2 15.4 15.8 17.0 17.9 18.2 18.6 18.6 18.8 18.9 18.9 19.2 19.2 19.5 GE 8000 15.4 15.7 16.9 17.4 18.6 19.5 19.7 20.2 20.2 20.3 20.4 20.5 20.5 20.7 20.7 21.1 GE 7000 16.0 16.4 18.0 19.7 20.9 21.3 21.4 21.6 18.5 20.6 21.3 21.5 21.6 21.9 21.9 22.2 GE 6000 16.0 16.4 18.0 18.5 19.7 20.6 20.9 21.3 21.3 21.4 21.5 21.6 21.6 21.9 21.9 22.2 GR 5000 16.5 16.8 18.5 18.9 20.2 21.1 21.3 21.7 21.7 22.0 22.1 22.2 22.2 22.4 22.5 22.9 GE 4500 17.7 18.0 19.8 20.3 21.5 22.4 22.6 23.1 23.1 23.3 23.4 23.5 23.5 23.8 23.9 24.2 GE 4000 19.5 26.5 19.8 25.0 25.2 25.7 25.7 25.9 26.1 26.8 21.9 22.9 24.1 26.0 26.1 26.3 GE 3500 22.5 23.1 25.3 26.3 27.8 28.7 28.9 29.5 29.6 29.8 29.9 30.0 30.0 30.3 30.4 30.7 GE 3000 24.9 30.4 32.4 32.8 33.0 25.4 27.8 31.3 31.5 32.1 32.2 32.5 32.6 32.6 28.8 33.3 GE 2500 27.8 28.5 31.1 32.2 33.9 34.8 35.0 35.5 35.7 35.9 36.0 36.1 36.1 36.3 36.4 36.8 GR 2000 30.4 31.1 38.1 38.9 39.0 39.2 39.3 39.5 39.5 30.8 34.2 35.4 37.2 38.3 39.7 40.1 GE 1800 32.1 33.0 36.3 37.9 39.8 40.7 40.9 41.5 41.6 41.8 41.9 42.0 42.0 42.3 42.4 42.7 GE 1500 37.4 45,7 46.4 47.2 36.3 41.0 42.6 44.6 45.5 46.3 46.6 46.7 46.9 46.9 47.1 47.5 GR 1200 38.5 39.7 43.7 45.3 47.5 48.8 49.0 49.7 49.8 50.0 50.3 50.4 50.4 50.7 50.8 51.1 GE 1000 41.8 52.4 53.1 40.5 46.4 48.0 50.7 51.9 53.3 53.5 53.8 53.9 53.9 54.1 54.3 54.6 GE 900 41.8 43.2 48.0 49.6 52.7 53.9 54.4 55.2 55.4 55.6 55.9 56.1 56.1 56.3 56.4 56.7 **GR** 800 45.1 57.2 58.2 58.4 43.6 49.9 51.6 55.2 56.5 58.0 58.7 58.9 58.9 59.1 59.2 59.5 700 CP 46.1 47.5 52.7 54.4 58.1 59.8 60.5 61.3 61.7 61.9 62.2 62.3 62.3 62.6 62.7 63.0 GE 600 47.3 48.8 55.5 58.0 61.8 63.7 64.8 65.7 66.3 66.5 66.9 67.0 67.0 67.3 67.4 67.7 GE 500 48.9 50.3 57.6 60.4 65.0 67.3 68.8 70.2 71.0 71.3 71.9 72.0 72.1 72.3 72.4 72.8 GE 400 49.2 50.7 58.3 61.3 66.5 69.2 71.2 72.8 73.8 74.3 75.0 75.2 75.3 75.6 75.7 76.0 77.4 GR 3001 49.3 50.8 59.3 62.4 67.8 71.1 73.4 75.1 76.5 78.5 78.8 79.1 79.7 79.8 80.6 GE 200 49.3 50.8 59.6 63.0 68.9 72.2 75.3 77.4 79.7 81.5 83.6 84.2 85.2 87.4 88.3 89.9 50.8 84.8 GE 100 49.3 59.6 68.9 75.7 77.7 80.2 82.1 85.5 86.9 92.9 63.0 72.2 89.8 98.5 GE 000 49.3 50.8 59.6 63.0 68.9 72.2 75.7 77.7 80.3 82.2 85.0 85.8 87.1 90.1 93.3 100.0

TOTAL NUMBER OF OBSERVATIONS 892

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 STATION NUMBER: 106070 LST TO UTC: - 1 MONTH: DEC HOURS: 09-11 CRIT. THG VISIBILITY IN METERS IN GR Œ GB Œ GR GE GE Œ GR Œ CE GE GE Œ Œ 112 48 24 20 06 00 PERT 90 80 60 40 32 16 12 10 08 04 NO CRIL 9.0 9.1 10.9 11.6 12.5 12.6 12.7 12.8 13.0 13.3 13.3 13.4 13.4 13.4 13.7 14.3 GB 20000 10.2 10.3 12.8 13.8 15.0 15.1 15.2 15.3 15.4 15.7 15.7 15.8 15.8 15.8 16.2 16.9 GE 18000 10.2 10.3 12.8 13.8 15.0 15.1 15.2 15.3 15.4 15.7 15.7 15.8 15.8 15.8 16.2 16.9 GE 16000 10.2 15.3 15.4 15.7 15.7 15.8 15.8 10.3 12.8 13.8 15.0 15.1 15.2 15.8 16.2 16.9 GE 14000 10.2 10.3 12.8 13.8 15.0 15.1 15.2 15.3 15.4 15.7 15.7 15.8 15.8 15.8 16.2 16.9 QE 12000 10.4 10.5 13.1 14.1 15.2 15.3 15.4 15.5 15.6 15.9 15.9 16.1 16.1 16.1 16.4 GE 10000 11.0 15.0 11.1 13.7 16.1 16.2 16.3 16.4 16.5 16.8 16.8 16.9 16.9 16.9 17.3 18.2 GE 9000 15.3 16.5 17.3 11.3 11.4 16.4 16.6 16.7 16.8 17.2 17.2 17.3 17.3 17.6 18.5 14.1 CDE 8000 13.0 13.1 16.5 18.2 19.4 19.6 19.9 20.2 20.3 20.6 20.6 20.7 20.7 20.7 21.0 21.9 7000 13.2 CR 13.3 16.7 18.5 19.7 19.9 20.3 20.5 20.6 20.9 20.9 21.0 21.0 21.0 21.4 22.3 GE 6000 13.2 16.7 20.6 20.9 20.9 21.0 13.3 18.5 19.7 19.9 20.3 20.5 21.0 22.3 21.0 21.4 GR 5000 13.3 19.0 13.4 16.9 20.3 20.5 20.8 21.0 21.2 21.5 21.5 21.6 21.9 21.6 21.5 22.8 4500 13.7 Œ 14.0 17.8 19.9 21.2 21.5 21.8 22.0 22.1 22.5 22.5 22.6 22.6 22.6 23.0 23.9 4000 20.5 22.9 25.5 25.8 25.8 Œ 16.2 16.4 24.4 24.8 25.1 25.4 25.9 25.9 25.9 26.4 27.2 GE 3500 18.1 18.5 25.5 28.5 22.8 27.0 27.5 28.1 28.5 28.6 27.8 28.0 28.6 28.6 29.0 29.9 GE 3000 20.2 20.7 25.2 27.9 29.7 30.1 30.5 30.7 30.8 31.1 31.1 31.2 31.2 GE 2500 22.1 22.8 27.8 30.5 32.3 32.8 33.1 33.3 33.4 33.8 33.8 33.9 33.9 33.9 34.3 35.2 39.6 GR 2000 25.0 25.9 31.3 34.1 36.2 36.8 37.3 37.7 37.8 38.1 38.1 38.3 38.3 38.3 38.8 1800 39.6 Œ 26.0 26.9 35.3 37.4 38.0 39.0 39.3 39.3 39.6 32.4 38.5 38.9 39.6 40.1 41.0 GR 1500 30.0 31.1 38.4 41.3 44.0 44.7 45.4 45.7 46.0 46.3 46.4 46.8 46.8 46.8 47.3 48.2 GE 1200 33.2 34.4 45.6 48.5 49.5 51.4 51.9 42.6 50.5 50.8 51.1 51.5 51.9 51.9 52.4 53.3 Œ 1000 36.1 37.4 46.2 49.4 53.4 54.5 55.7 56.0 56.3 56.6 56.7 57.1 57.1 57.1 57.6 58.5 55.6 57.8 GE 900 36.8 38.1 47.2 50.4 57.4 58.1 58.3 58.7 54.5 57.0 58.7 58.7 59.1 60.0 800 Œ 38.0 39.3 48.4 51.8 55.9 57.0 58.6 59.1 59.6 59.9 60.1 60.6 60.6 60.6 61.0 61.9 700 38.5 600 39.3 Œ 40.0 49.9 53.6 58.1 59.4 61.0 61.7 62.2 62.8 63.0 63.5 63.5 63.5 63.9 64.8 60.6 67.4 Œ 40.8 51.9 55.7 61.9 63.6 64.2 64.8 65.4 65.7 66.1 66.1 66.1 66.6 500 l 58.1 70.3 70.5 Œ 39.9 41.3 53.4 63.3 65.0 66.8 67.8 68.5 69.3 69.8 70.3 71.0 71.9 Œ 400 40.3 41.7 54.3 59.6 65.1 66.8 68.7 70.2 71.5 72.8 73.3 74.0 74.1 74.4 74.9 75.7 300 67.7 Œ 40.3 41.7 54.3 60.0 65.8 70.0 72.1 74.1 75.7 76.6 78.0 78.3 78.7 79.7 80.8 200 Œ 40.4 41.9 54.4 60.1 65.9 68.0 70.9 73.2 75.5 77.9 79.5 81.6 82.7 85.0 87.0 90.5 GE 100 40.4 41.9 54.4 60.1 65.9 68.0 70.9 73.4 75.7 78.3 80.0 82.2 83.6 86.9 90.7 98.6 GE 000 40.4 41.9 54.4 60.1 65.9 68.0 70.9 73.4 75.7 78.3 80.0 82.2 83.6 87.0 91.0 100.0

TOTAL NUMBER OF OBSERVATIONS 903

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: DEC HOURS: 12-14

CEI	LING					1	VISIBIL	ITY IN I	ÆTERS								
I	N	GE	GE	GE	GE	GE	GE	Œ	GE	GE	GE	GE	GE	Œ	GE	Œ	GE
FE	et	112	90	80	60	48	40	32	24	20	16	12	10	08	06	04	00
NO	CEIL	9.1	9.4	12.3	12.9	13.5	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.8	14.0
	20000	12.2	12.5	16.2	16.8	17.6	17.9	18.0	18.0	18.1	18.1	18.1	18.1	18.1	18.1	18.3	18.5
	18000	12.2	12.5	16.2	16.8	17.6	17.9	18.0	18.0	18.1	18.1	18.1	18.1	18.1	18.1	18.3	18.5
	16000	12.4	12.7	16.4	17.0	17.8	18.1	18.3	18.3	18.4	18.4	18.4	18.4	18.4	18.4	18.5	18.7
	14000	12.5	12.8	16.5	17.1	17.9	18.3	18.4	18.4	18.5	18.5	10.5	18.5	18.5	18.5	18.6	18.8
GE	12000	12.6	12.9	16.6	17.3	18.0	18.4	18.5	18.5	18.6	18.6	18.6	18.6	18.6	18.6	18.7	18.9
GE	10000	13.3	13.6	17.3	18.4	19.1	19.5	19.6	19.6	19.7	19.7	19.7	19.7	19.7	19.7	19.8	20.0
GE	9000	13.5	13.8	17.8	18.9	19.7	20.0	20.1	20.1	20.2	20.4	20.4	20.4	20.4	20.4	20.5	20.7
GE	8000	14.8	15.2	19.4	20.7	21.6	21.9	22.2	22.2	22.3	22.5	22.5	22.5	22.5	22.5	22.8	23.0
GE	7000	15.2	15.5	19.7	21.0	21.9	22.2	22.6	22.6	22.7	22.8	22.9	22.9	22.9	22.9	23.2	23.5
GE	6000	15.2	15.5	19.7	21.0	21.9	22.2	22.6	22.6	22.7	22.8	22.9	22.9	22.9	22.9	23.2	23.5
GE	5000	15.2	15.5	19.7	21.0	22.1	22.5	22.8	22.8	22.9	23.0	23.1	23.1	23.1	23.1	23.5	23.7
GE	4500	15.5	15.8	20.2	21.6	22.8	23.1	23.5	23.5	23.6	23.7	23.8	23.8	23.8	23.8	24.1	24.3
GE	4000	17.0	17.6	22.5	23.8	25.1	25.4	25.8	25.8	25.9	26.0	26.1	26.1	26.1	26.1	26.4	26.7
GE	3500	18.7	19.4	24.3	25.7	27.0	27.3	27.7	27.7	27.8	27.9	28.0	28.0	28.0	28.0	28.3	28.5
GE	3000	21.7	22.7	28.0	29.4	30.9	31.4	31.7	32.0	32.2	32.4	32.5	32.6	32.6	32.6	33.0	33.2
95	3000	21.,	22.,	20.0	43.4	30.9	31.4	32.7	32.0	32.2	34.7	32.3	32.0	32.0	32.0	33.0	33.4
GE	2500	23.9	24.9	30.4	31.9	33.5	34.1	34.4	34.6	34.8	35.1	35.2	35.3	35.3	35.3	35.6	35.8
GE	2000	28.9	29.9	36.2	37.7	39.6	40.2	40.6	40.9	41.2	41.4	41.5	41.6	41.6	41.6	41.9	42.1
GE	1800	30.8	31.7	38.8	40.5	42.8	43.5	43.9	44.2	44.5	44.7	44.8	44.9	44.9	44.9	45.2	45.5
GE	1500	33.8	35.0	43.4	45.0	47.5	48.2	48.8	49.1	49.3	49.6	49.7	49.8	49.8	49.8	50.1	50.3
GE	1200	37.8	38.9	48.7	50.4	53.0	53.8	54.3	54.6	54.9	55.1	55.2	55.3	55.3	55.3	55.6	55.9
GE	1000	41.3	42.5	53.3	55.4	58.4	59.3	60.1	60.5	60.7	61.0	61.1	61.2	61.2	61.2	61.5	61.7
GE	900	42.1	43.5	54.9	57.0	60.2	61.1	61.8	62.3	62.5	63.1	63.2	63.3	63.3	63.3	63.6	63.8
GE	800	42.5	43.9	55.9	58.3	61.7	62.6	63.4	63.8	64.0	64.7	64.8	64.9	64.9	64.9	65.3	65.5
GE	700	43.0	44.5	58.2	60.8	65.6	66.8	67.6	68.1	68.4	69.0	69.1	69.2	69.2	69.2	69.6	69.8
GE	600	43.6	45.0	59.7	62.6	68.1	69.4	70.1	70.8	71.1	71.8	72.0	72.1	72.1	72.1	72.5	72.7
GE	500	44.2	45.7	61.3	64.5	70.6	71.9	72.8	74.7	75.0	75.8	76.0	76.1	76.5	76.5	76.9	77.1
GE	400	45.0	46.5	62.7	65.9	72.2	73.8	75.2	78.0	78.4	79.3	79.8	79.9	80.3	80.4	80.8	81.0
GE	300	45.1	46.6	63.1	66.3	73.6	75.1	76.7	79.5	80.8	82.1	82.7	83.1	83.6	84.2	84.6	85.5
GE	200	45.1	46.6	63.1	66.3	73.7	75.2	76.8	80.2	81.6	83.6	86.2	86.9	88.1	89.4	90.7	93.5
GE	100	45.1	46.6	63.1	66.3	73.7	75.2	76.8	80.2	81.6	83.8	86.9	87.8	89.0	91.0	93.9	98.9
GE	000	45.1	46.6	63.1	66.3	73.7	75.2	76.8	80.2	81.6	83.8	86.9	87.8	89.0	91.2	94.2	100.0

TOTAL NUMBER OF OBSERVATIONS 904

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: DEC HOURS: 15-17 VISIBILITY IN METERS CRILING Œ IN GR GR Œ GE Œ GE GE GE GR GE GR GE Œ GR Œ FEET 112 90 80 60 48 32 24 20 16 12 10 80 06 04 00 40 NO CRIL | 11.9 12.1 15.2 15.6 16.4 16.7 16.8 16.8 17.1 17.2 17.3 17.3 17.3 17.3 17.3 17.3 GB 20000 13.8 18.1 19.6 19.6 19.9 20.0 20.1 20.1 20.1 20.1 20.1 14.1 17.7 19.0 19.4 20.1 GR 18000 13.8 14.1 17.7 18.1 19.0 19.4 19.6 19.6 19.9 20.0 20.1 20.1 20.1 20.1 20.1 20.1 GE 16000 13.8 14.1 17.7 18.1 19.0 19.4 19.6 19.6 19.9 20.0 20.1 20.1 20.1 20.1 20.1 20.1 GE 14000 13.8 18.1 19.5 19.6 19.9 20.0 20.1 20.1 20.1 20.1 20.1 20.1 14.1 17.7 19.0 19.4 14.3 20.1 20.3 20.3 GE 12000 14.0 17.9 18.3 19.2 19.7 19.8 19.8 20.2 20.3 20.3 20.3 20.3 20.8 GR 10000 14.3 14.7 18.3 18.8 19.7 20.1 20.2 20.2 20.6 20.7 20.8 20.8 20.8 20.8 20.8 GE 9000 14.9 15.3 19.0 19.4 20.3 20.9 21.2 21.2 21.6 21.7 21.8 21.8 21.8 21.8 21.8 21.8 GE 8000 15.8 23.7 24.2 24.3 24.3 24.3 16.2 20.9 21.6 22.6 23.1 23.7 24.0 24.3 24.3 24.3 GE 7000 16.7 17.1 21.8 22.4 23.4 24.0 24.6 24.6 24.9 25.1 25.2 25.2 25.2 25.2 25.2 25.2 Œ 6000 16.8 17.2 21.9 22.6 23.8 24.3 24.9 24.9 25.2 25.4 25.6 25.6 25.6 25.6 25.6 25.6 GE 5000 25.9 25.9 26.6 26.6 17.6 18.0 22.8 23.6 24.8 25.3 26.2 26.4 26.6 26.6 26.6 26.6 4500 26.8 27.3 27.4 27.4 27.4 GR 18.4 18.9 23.7 24.4 25.7 26.2 26.8 27.1 27.4 27.4 27.4 GE 4000 20.6 21.1 26.3 27.2 28.4 29.2 29.8 29.8 30.1 30.3 30.4 30.4 30.4 30.4 30.4 30.4 32.6 GR 3500 22.1 22.7 28.2 29.1 30.6 31.3 31.9 31.9 32.2 32.4 32.6 32.6 32.6 32.6 32.6 GIR 3000 27.1 38.2 38.4 38.6 38.6 38.6 38.6 27.7 33.9 34.8 36.6 37.3 37.9 37.9 38.6 38.6 GE 2500 29.3 29.9 36.2 37.1 38.9 39.7 40.2 40.2 40.6 40.8 40.9 40.9 40.9 40.9 40.9 40.9 GR 2000 33.8 34.4 41.1 42.1 44.2 45.0 45.7 45.8 46.2 46.4 46.6 46.6 46.6 46.6 46.6 46.6 1800 35.6 48.9 49.4 49.7 49.8 49.8 Œ 36.2 43.6 44.9 47.4 48.2 49.0 49.8 49.8 49.8 49.8 GE 1500 40.4 41.2 49.4 51.0 53.7 54.6 55.3 55.6 56.0 56.2 56.3 56.3 56.3 56.3 56.3 56.3 GR 1200 42.8 43.6 52.3 53.9 56.8 57.7 58.4 58.7 59.1 59.3 59.4 59.4 59.4 59.4 59.6 59.6 GR 10001 45.6 46.4 56.1 57.7 60.8 61.9 62.8 63.2 63.7 63.9 64.0 64.0 64.0 64.0 64.1 64.1 900 46.0 65.1 65.3 65.4 Œ 46.9 56.9 58.7 62.0 63.3 64.2 64.7 65.4 65.4 65.4 65.6 65.6 Œ 800 46.6 47.4 58.1 60.0 63.4 65.0 66.0 66.6 67.1 67.3 67.4 67.4 67.4 67.4 67.6 67.6 Œ 700 47.3 48.2 60.0 61.9 65.9 67.4 68.8 69.3 69.9 70.1 70.3 70.3 70.4 70.4 70.6 70.6 600 48.3 49.2 61.3 64.2 70.3 71.8 72.3 72.9 73.4 73.8 73.8 73.9 74.0 74.1 74.1 68.4 Œ 500 48.8 49.7 65.7 75.9 77.0 62.6 70.7 72.9 74.6 75.2 76.7 77.0 77.1 77.2 77.3 77.3 Œ 400 49.1 50.0 63.1 66.3 79.3 81.8 81.9 72.1 74.4 76.8 78.0 80.4 81.4 81.4 81.7 81.9 Œ 300 49.2 50.2 63.4 66.7 73.0 75.7 78.0 80.7 82.3 84.2 85.6 85.7 86.0 86.1 86.8 87.2 CE 200 49.2 50.2 63.4 66.7 73.1 76.1 78.4 81.2 83.1 85.9 87.9 88.3 89.2 90.6 91.9 93.9 50.2 GR 100 49.2 63.4 66.7 73.1 76.1 78.4 81.2 83.2 86.0 88.3 88.9 89.9 91.6 94.1 99.3 GE 000 49.2 50.2 63.4 66.7 73.1 76.1 78.4 81.2 83.2 86.0 88.3 88.9 89.9 91.6 94.1 100.0

TOTAL NUMBER OF OBSERVATIONS 900

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: DEC HOURS: 18-20 CRILING VISIBILITY IN METERS IN Œ GR GE GR GR GE GE GE Œ GE Œ GE Œ GE GE GE FEET 112 90 60 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL | 15.7 16.2 17.4 17.5 18.2 18.4 18.5 18.7 18.7 18.9 19.1 19.2 19.2 19.2 19.2 19.2 21.6 GE 20000 17.6 18.0 19.5 19.7 20.3 20.6 20.7 21.1 21.1 21.3 21.5 21.6 21.6 21.6 21.6 GE 18000 17.6 19.5 21.3 18.0 19.7 20.3 20.6 20.7 21.1 21.1 21.5 21.6 21.6 21.6 21.6 21.6 GE 16000 17.6 18.0 19.5 19.7 20.3 20.6 20.7 21.1 21.1 21.3 21.5 21.6 21.6 21.6 21.6 21.6 21.1 21.3 GE 14000 19.5 20.7 20.3 20.6 21.1 21.3 21.5 21.6 21.6 21.6 21.6 17.6 18.0 19.7 21.6 GE 12000 17.7 18.2 19.7 19.8 20.5 20.7 20.8 21.3 21.4 21.6 21.7 21.7 21.7 21.7 21.7 GE 10000 18.2 18.6 20.2 20.3 21.0 21.3 21.4 21.8 21.8 22.0 22.2 22.3 22.3 22.3 22.3 22.3 GE 9000 19.1 20.8 20.9 21.6 21.8 22.2 22.6 22.6 22.8 23.0 23.1 23.1 23.1 23.1 18.5 23.1 GE 8000 25.4 25.9 20.8 23.2 23.7 25.9 26.0 26.2 26.3 26.3 26.3 26.3 21.4 24.7 24.9 26.3 GE 7000 21.3 21.8 23.7 24.1 25.2 25.4 25.9 26.3 26.3 26.4 26.7 26.8 26.8 26.8 26.8 26.8 GB 6000 21.8 23.9 24.4 25.5 25.7 26.2 26.7 26.7 26.8 27.0 27.1 27.1 27.1 27.1 27.1 21.3 GB 5000 21.7 22.3 25.2 27.0 27.5 27.5 27.6 27.8 27.9 27.9 27.9 27.9 24.5 26.3 26.6 27.9 GE 4500 23.2 25.4 26.1 27.2 27.5 27.9 28.4 28.4 28.5 28.7 28.9 28.9 28.9 28.9 22.6 28.9 GE 4000 25.2 25.7 28.4 29.1 30.2 30.5 30.9 31.4 31.4 31.5 31.7 31.8 31.8 31.8 31.8 31.8 GE 3500 28.7 29.5 32.6 33.4 34.7 35.1 35.5 36.0 36.0 36.1 36.3 36.4 36.4 36.4 36.4 36.4 GE 3000 40.1 40.1 31.8 32.9 36.2 37.1 38.4 38.7 39.2 39.7 39.7 39.8 40.0 40.1 40.1 40.1 GE 2500 33.0 34.0 37.9 38.9 40.1 40.6 41.0 41.5 41.5 41.7 42.0 42.1 42.1 42.1 42.1 42.1 GR 2000 37.2 38.4 42.5 43.6 45.3 45.7 46.3 46.8 46.8 47.0 47.2 47.4 47.4 47.4 47.4 47.4 1800 GR 39.8 40.9 45.4 46.4 48.2 48.7 49.3 49.8 49.8 50.0 50.2 50.3 50.3 50.3 50.3 50.3 GE 1500 45.7 54.6 55.6 55.9 56.2 44.6 50.9 52.1 53.9 55.2 55.6 56.1 56.2 56.2 56.2 56.2 1200 60.1 GE 47.7 49.0 54.6 56.0 57.9 58.6 59.2 59.7 59.7 59.9 60.2 60.2 60.2 60.2 60.2 GE 1000 50.8 52.1 58.0 59.4 61.7 62.5 63.3 64.3 64.3 64.5 64.7 64.8 64.8 64.8 64.8 64.8 GE 900 51.8 53.1 59.4 60.8 63.4 64.3 65.1 66.0 66.0 66.2 66.4 66.7 66.7 66.7 66.7 66.7 OR 800 64.8 66.0 66.8 67.A 68.0 68.5 68.5 60.1 62.0 67.8 68.3 68.5 68.5 52.3 53.6 68.5 GE 700 52.5 53.8 61.0 63.0 66.2 67.5 68.3 69.3 69.3 69.7 69.9 70.1 70.5 70.5 70.5 70.5 73.4 73.4 72.1 GE 600 53.3 62.6 65.3 72.2 54.6 68.6 69.9 71.0 72.6 72.9 73.1 73.4 73.4 Œ 500 54.4 55.7 68.0 72.9 75.9 77.0 78.0 78.5 78.7 79.1 79.4 79.4 64.9 74.4 79.4 79.4 ar 400 54.5 55.9 65.5 68.7 73.9 75.4 76.9 78.0 79.9 80.6 81.1 81.5 81.8 82.0 82.0 82.0 GE 300 54.6 56.0 65.7 69.1 74.7 76.3 77.8 80.1 82.2 83.3 84.1 84.8 85.4 85.5 86.0 86.6 GE 200 54.6 65.7 74.7 76.4 83.1 88.4 56.0 69.1 77.9 80.8 84.4 86.0 87.2 89.8 91.1 92.8 GE 100 54.6 56.0 65.7 69.1 74.7 76.4 78.0 80.9 83.3 84.9 86.7 88.3 89.8 92.0 94.3 99.2 GE 000 54.6 56.0 65.7 69.1 74.7 76.4 78.0 80.9 83.3 84.9 86.7 88.3 89.8 92.0 94.3 100.0

TOTAL NUMBER OF OBSERVATIONS 870

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 MONTH: DEC HOURS: 21-23 LST TO UTC: - 1 CEILING VISIBILITY IN METERS GE IN GE æ GR CIR. GR GR GE GR CR GR CR CE CR CE œ FRET 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CRIL 14.8 15.3 16.8 16.R 17.1 17.5 17.6 17.7 17.7 17.7 17.8 17.8 17.8 17.8 17.9 17.9 GR 20000 16.7 17.1 18.7 18.7 19.3 20.0 20.2 20.3 20.3 20.3 20.5 20.5 20.5 20.5 20.6 20.2 20.3 20.5 GE 18000 16.7 17.1 18.7 18.7 20.0 20.3 20.5 20.5 20.5 20.6 20.6 19.3 20.3 **GE** 16000 16.7 17.1 18.7 18.7 19.3 20.0 20.2 20.3 20.3 20.3 20.5 20.5 20.5 20.5 20.6 20.6 GB 14000 16.7 20.6 17.1 18.7 18.7 19.3 20.0 20.2 20.3 20.3 20.3 20.5 20.5 20.5 20.5 20.6 GE 12000 16.8 17.2 18.9 18.9 19.4 20.1 20.3 20.5 20.5 20.5 20.6 20.6 20.6 20.6 20.7 20.7 GE 10000 17.1 17.6 19.5 21.0 21.1 21.3 21.3 19.5 20.1 20.8 21.1 21.1 21.3 21.3 21.4 21.4 GE 9000 18.0 18.5 20.5 20.5 21.0 21.7 22.0 22.1 22.1 22.1 22.2 22.2 22.2 22.2 22.3 22.3 GE 8000 19.7 20.1 22.6 22.8 23.7 24.6 24.7 24.7 24.7 24.8 24.8 24.8 24.8 24.9 24.9 24.4 GR 7000 19.7 20.1 22.8 22.9 23.8 24.5 24.7 24.8 24.8 24.8 24.9 24.9 24.9 24.9 25.1 25.1 GE 6000 19.7 20.1 22.9 23.0 23.9 24.6 24.8 24.9 24.9 24.9 25.1 25.1 25.1 25.1 25.2 25.2 GE 5000 19.9 20.3 23.3 23.4 24.4 25.1 25.3 25.4 25.4 25.4 25.5 25.5 25.5 25.5 25.6 25.6 GE 4500 21.4 21.8 24.9 25.1 26.0 26.9 27,2 27.4 27.4 27.4 27.5 27.5 27.5 27.5 27.6 27.6 29.4 GR 4000 27.8 28.7 29.1 29.2 23.0 23.4 26.8 26.9 29.2 29.2 29.3 29.3 29.3 29.3 29.4 31.4 Œ 3500 25.2 25.6 29.2 29.3 30.3 31.7 32.0 32.0 32.0 32.1 32.1 32.1 32.1 32.2 32.2 28.4 29.0 35.5 35.7 35.7 GE 3000 32.9 35.3 35.5 35.5 35.6 35.6 35.6 35.6 32.8 33.9 34.9 Œ 2500 30.1 30.7 34.8 34.9 36.0 37.0 37.4 37.6 37.6 37.6 37.7 37.7 37.7 37.7 37.8 37.8 Œ 44.1 2000 35.5 36.1 40.8 43.6 43.8 44.0 44.1 44.1 44.1 40.9 42.2 43.2 43.8 44.3 44.3 46.8 GE 1800 37.8 38.4 43.3 43.4 44.7 45.7 46.1 46.3 46.3 46.6 46.7 46.7 46.7 46.7 46.8 Œ 1500 42.3 42.9 48.4 48.5 50.0 51.0 51.4 51.7 51.7 52.0 52.1 52.1 52.1 52.1 52.2 52.2 57.0 **CIR** 1200 45.7 46.6 52.8 53.0 54.6 55.7 56.1 56.4 56.4 56.8 56.9 56.9 56.9 56.9 57.0 GR 49.5 57.7 62.0 62.1 62.1 1000 50.3 57.5 59.4 60.8 61.3 61.6 61.6 62.1 62.1 52.2 62.2 Œ 900 51.0 51.8 59.3 59.5 61.6 63.0 63.4 63.8 63.8 64.1 64.3 64.3 64.3 64.3 64.4 64.4 Œ 800 52.3 53.2 61.0 61.4 63.9 65.5 66.2 66.8 66.8 67.4 67.5 67.5 67.5 67.5 67.6 67.6 Œ 700 53.8 68.9 70.2 70.6 54.7 63.0 63.6 66.4 68.0 69.5 69.7 70.3 70.6 70.6 70.7 70.7 Œ 600 54.8 55.7 64.9 65.6 69.3 71.3 72.1 72.9 73.0 73.6 73.7 73.9 73.9 73.9 74.0 Œ 500 55.6 56.6 66.1 66.9 71.4 73.6 74.4 75.4 76.0 76.6 76.8 77.4 77.7 77.7 77.8 77.8 Œ 400 55.9 56.8 66.8 67.6 73.0 75.4 76.8 77.8 78.7 79.4 79.7 80.3 80.8 80.8 80.9 81.0 αk 300 56.2 57.1 67.2 68.2 73.8 76.3 77.9 79.3 80.3 81.6 82.3 83.3 83.8 83.8 84.3 84.5 Œ 200 56.2 57.1 67.4 68.3 74.1 76.8 78.5 80.1 81.5 83.7 86.0 87.2 88.5 89.7 91.4 92.4 GE 78.6 80.2 83.9 100 56.3 57.2 67.5 68.4 74.3 86.3 87.8 89.5 76.9 81.7 91.1 94.4 99.1 Œ 000 56.3 57.2 67.5 68.4 74.3 76.9 78.6 80.2 81.7 83.9 86.3 87.8 89.5 91.1 94.4 100.0

TOTAL NUMBER OF OBSERVATIONS 870

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: DEC HOURS: ALL VISIBILITY IN METERS GE GR GR GE Œ GR IN GR GR Œ GR GE Œ GE Œ GR GE FEET 112 90 80 60 48 40 32 24 20 16 12 10 08 06 04 00 NO CEIL 12.9 13.2 15.2 15.5 16.3 16.7 16.8 17.0 17.1 17.2 17.3 17.4 17.4 17.4 17.5 GE 20000 14.5 14.8 17.2 17.6 18.5 19.0 19.2 19.4 19.5 19.6 19.7 19.8 19.8 19.9 19.9 20.1 GR 18000 14.5 14.8 17.2 17.6 18.5 19.0 19.2 19.4 19.5 19.6 19.7 19.8 19.8 19.9 19.9 20.1 19.4 GR 16000 19.2 19.5 19.7 20.1 14.5 14.9 17.2 17.6 18.5 19.0 19.7 19.8 19.8 19.9 20.0 GE 14000 14.5 14.9 18.5 19.0 19.2 19.5 19.5 19.7 19.8 19.8 19.9 19.9 20.0 20.1 17.2 17.6 GE 12000 14.6 19.2 19.4 19.6 19.7 19.9 20.0 20.3 15.0 17.4 17.8 18.7 19.8 20.0 20.1 20.1 GE 10000 15.0 15.4 17.9 18.4 19.3 19.8 20.0 20.2 20.3 20.5 20.5 20.6 20.6 20.7 GE 9000 15.8 20.5 20.7 20.8 21.1 21.2 21.2 21.2 15.4 18.3 18.8 19.7 20.3 21.0 21.3 21.5 GE 8000 16.8 17.3 20.2 20.8 21.9 22.4 22.8 23.0 23.1 23.3 23.4 23.5 23.5 23.5 23.6 23.8 GE 7000 17.2 17.6 20.7 21.4 22.5 23.0 23.3 23.6 23.7 23.9 24.0 24.1 24.1 24.1 24.2 24.4 5000 24.2 GR 17.2 17.6 20.7 21.5 22.6 23.1 23.4 23.7 23.8 24.0 24.1 24.2 24.2 24.3 24.5 GE 5000 17.6 18.0 22.0 23.7 24.3 24.4 24.7 24.8 24.8 21.2 23.2 24.1 24.6 24.8 24.9 25.1 23.1 GE 4500 18.6 19.0 22.3 24.3 24.8 25.2 25.4 25.5 25.7 25.8 25.9 25.9 26.0 26.1 26.3 GE 4000 20.5 21.0 24.5 25.5 26.8 27.4 27.8 28.0 28.1 28.3 28.4 28.5 28.5 28.5 28.7 28.8 30.8 GR 3500 22.7 23.3 27.1 28.1 29.5 30.2 30.5 30.9 31.1 31.2 31.3 31.3 31.3 31.5 31.6 GE 3000 25.9 26.6 30.8 31.9 33.4 34.1 34.8 34.9 35.1 35.2 35.3 35.3 35.4 35.5 35.7 GE 2500 27.9 28.6 33.1 34.2 35.8 36.5 36.9 37.2 37.3 37.5 37.6 37.7 37.7 37.8 37.9 38.1 GB 2000 31.8 32.7 37.5 38.8 40.6 41.3 41.8 42.1 42.3 42.5 42.6 42.7 42.8 42.8 42.9 43.1 1800 43.1 44.9 45.2 45.4 45.5 GR 33.8 34.6 41.2 44.7 45.1 45.4 45.6 45.8 39.8 43.9 44.4 GE 1500 38.0 39.0 44.9 46.4 48.5 49.4 49.9 50.3 50.4 50.8 50.9 51.0 51.1 51.1 51.2 51.4 1200 54.5 54.9 55.0 55.2 55.3 GE 40.9 42.0 48.6 50.1 52.5 53.4 54.0 54.4 55.2 55.4 55.6 GR 1000 43.8 45.0 52.3 54.0 56.7 57.8 58.5 59.0 59.2 59.5 59.7 59.8 59.9 59.9 60.0 60.2 900 46.4 55.8 58.8 60.6 61.2 61.4 61.8 61.9 62.1 62.1 62.2 62.5 GE 45.1 54.1 59.9 62.3 GE 800 46.0 47.3 55.3 57.3 60.6 61.8 62.6 63.3 63.5 63.9 64.1 64.3 64.3 64.4 64.5 64.7 GE 700 47.1 48.4 57.2 59.3 63.0 65.4 66.1 66.4 66.9 67.1 67.3 67.4 67.4 67.5 67.7 64.5 GE 600 48.0 49.3 58.9 61.5 65.7 67.3 68.5 69.2 69.5 70.1 70.4 70.6 70.7 70.7 70.9 71.0 GE 50.1 68.7 75.0 500 l 48.8 60.5 63.5 70.5 72.0 73.1 73.8 74.4 74.8 75.3 75.3 75.5 75.7 CE 400 49.3 50.6 61.5 64.7 70.4 72.6 74.4 75.8 76.8 77.8 78.4 78.7 79.0 79.1 79.2 79.4 GR 300 49.4 50.8 65.2 75.9 77.9 79.2 80.6 81.5 82.2 82.6 82.8 61.9 71.4 73.8 83.3 83.9 200 GE 49.4 50.8 62.0 65.3 71.7 74.2 76.5 78.9 80.6 82.7 84.6 85.8 86.9 88.6 89.8 91.6 GE 100 49.5 50.8 62.0 65.3 71.7 74.2 76.6 79.0 80.8 83.0 85.2 86.6 88.0 90.4 93.2 98.9 GE 000 49.5 50.8 62.0 65.3 71.7 74.2 76.6 79.0 80.8 83.1 85.2 86.7 88.1 90.6 93.4 100.0

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: ALL HOURS: ALL

				LST	TO UTC	: - 1					MONTH:	ALL HO	URS: AL	L			
CEI	LING	•••••	• • • • • •	•••••	• • • • • • •	•••••	 Visibil	ITY IN I	METERS	• • • • • •	• • • • • •	• • • • • •	• • • • • • •	•••••	• • • • • •	• • • • • • •	•••••
I	n	GE	GE	GE	Œ	GE	GE	GE	Œ	GE	Œ	GE	GE	GE	GE	GE	GE
FE	et	112	90	80	60	48	40	32	24	20	16	12	10	80	06	04	00
•••	•••••		• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • •
NO	CEIL	25.4	26.1	29.6	30.3	31.7	32.2	32.6	33.0	33.2	33.4	33.5	33.6	33.7	33.8	33.9	34.1
Œ	20000	29.0	29.8	33.8	34.7	36.3	36.8	37.4	37.8	38.0	38.3	38.4	38.5	38.6	38.7	38.8	39.0
Œ	18000	29.0	29.9	33.9	34.7	36.4	36.9	37.4	37.8	38.1	38.3	38.5	38.6	38.6	38.7	38.9	39.1
Œ	16000	29.1	29.9	33.9	34.7	36.4	36.9	37.4	37.9	38.1	38.3	38.5	38.6	38.6	38.7	38.9	39.1
Œ	14000	29.2	30.0	34.0	34.9	36.5	37.1	37.6	38.0	38.2	38.5	38.6	38.7	38.8	38.9	39.0	39.2
GE	12000	29.4	30.3	34.4	35.2	36.9	37.4	38.0	38.4	38.6	38.9	39.0	39.1	39.2	39.3	39.4	39.6
GE	10000	31.2	32.2	36.5	37.4	39.2	39.8	40.3	40.8	41.0	41.3	41.5	41.5	41.6	41.7	41.9	42.1
GE	9000	31.9	32.9	37.3	38.3	40.2	40.7	41.3	41.8	42.0	42.3	42.5	42.6	42.6	42.8	42.9	43.1
GE	8000	34.3	35.3	40.1	41.1	43.1	43.8	44.5	45.0	45.2	45.5	45.7	45.8	45.9	46.0	46.1	46.4
GE	7000	34.8	35.8	40.7	41.8	43.9	44.5	45.2	45.7	46.0	46.3	46.5	46.6	46.7	46.8	46.9	47.2
GE	6000	35.0	36.1	41.0	42.1	44.2	44.8	45.6	46.1	46.3	46.6	46.8	46.9	47.0	47.1	47.3	47.5
GE	5000	36.3	37.4	42.5	43.6	45.7	46.4	47.1	47.7	47.9	48.2	48.4	48.5	48.6	48.7	48.9	49.1
GE	4500	38.0	39.1	44.4	45.5	47.7	48.4	49.2	49.7	50.0	50.3	50.5	50.6	50.7	50.8	51.0	51.2
Œ	4000	41.2	42.4	48.0	49.3	51.6	52.3	53.2	53.7	54.0	54.3	54.5	54.6	54.7	54.8	55.0	55.2
Œ	3500	44.4	45.8	51.8	53.1	55.6	56.3	57.2	57.8	58.1	58.4	58.6	58.7	58.8	59.0	59.1	59.4
GE	3000	48.3	49.8	56.4	57.8	60.5	61.3	62.2	62.9	63.2	63.6	63.8	63.9	64.0	64.2	64.3	64.6
GE	2500	50.2	51.8	58.6	60.2	62.9	63.8	64.8	65.4	65.8	66.2	66.4	66.5	66.6	66.8	66.9	67.2
GE	2000	53.4	55.1	62.5	64.1	67.0	68.0	69.0	69.7	70.1	70.5	70.8	70.9	71.0	71.2	71.3	71.6
CE	1800	54.5	56.2	63.8	65.5	68.5	69.4	70.5	71.3	71.6	72.1	72.3	72.5	72.6	72.7	72.9	73.1
GIS.	1500	57.2	59.0	67.3	69.0	72.3	73.4	74.5	75.4	75.8	76.3	76.6	76.7	76.8	77.0	77.1	77.4
GE	1200	59.2	61.1	69.9	71.8	75.3	76.5	77.7	78.6	79.1	79.6	79.9	80.0	80.1	80.3	80.5	80.7
GE	1000	60.8	62.7	72.0	74.0	77.9	79.1	80.5	81.5	82.0	82.6	82.9	83.1	83.2	83.3	83.5	83.8
GE	900	61.4	63.4	73.0	75.1	79.0	80.4	81.8	82.8	83.3	84.0	84.3	84.5	84.6	84.7	84.9	85.2
GE	800	61.9	63.9	73.8	75.9	80.0	81.4	82.9	84.0	84.5	85.2	85.6	85.7	85.8	86.0	86.2	86.4
GE	700	62.5	64.5	74.8	77.0	81.4	82.9	84.4	85.6	86.2	86.9	87.3	87.5	87.6	87.8	88.0	88.2
Œ	600	62.9	64.9	75.6	78.0	82.5	84.1	85.8	87.0	87.7	88.5	89.0	89.1	89.3	89.4	89.6	89.9
CE	500	63.3	65.3	76.3	78.8	83.8	85.5	87.3	88.8	89.5	90.4	91.0	91.2	91.4	91.6	91.7	92.0
GE	400	63.4	65.4	76.7	79.3	84.5	86.3	88.4	90.0	90.9	91.9	92.6	92.8	93.0	93.2	93.4	93.7
Œ	300	63.5	65.5	76.8	79.4	84.8	86.7	88.9	90.6	91.7	92.8	93.7	94.0	94.3	94.6	94.8	95.2
GE	200	63.5	65.5	76.8	79.5	84.9	86.8	89.1	90.9	92.0	93.4	94.4	94.9	95.4	96.0	96.6	97.3
GE	100	63.5	65.5	76.8	79.5	84.9	86.8	89.1	91.0	92.1	93.5	94.6	95.2	95.7	96.5	97.6	99.7
QE.	000	63.5	65.5	76.8	79.5	84.9	86.8	89.1	91.0	92.1	93.5	94.6	95.2	95.7	96.6	97.7	100.0
		• • • • • • •	• • • • • •														

TOTAL NUMBER OF OBSERVATIONS: 84997

PPPPP	PPP	AAA	AAA	RRRRI	RRRR	TETELETETE	REBERERER
PPPPP	PPPP	AAAA	AAAA	RRRR	RRRRR	TIPITIPITIPITI	REFERENCE
PP	PP	AA	AA	RR	RR	TT	EE
PP	PP	AA	AA	RR	RR	TT	EE
PPPPP	PPPP	AA	AA	RRRR	RRRRR	TT	EEEEEE
PPPPP	PPP	AAAAA	AAAAA	RRRR	RRRR	TT	REERRE
PP		AAAAA	AAAAA	RR	RR	TT	EB
PP		AA	AA	RR	RR	TT	EE
PP		AA	AA	RR	RR	TT	EEEEEEEEE
PP		AA	AA	RR	RR	بلمل	RKKKKKKKKK

PART E

TEMPERATURE AND RELATIVE HUMIDITY SUMMARIES

TEMPERATURE--CUMULATIVE PERCENT OCCURRENCE FREQUENCY (POF).

THESE TABLES ARE CREATED FROM SUMMARY OF DAY DATA AND GIVE CUMULATIVE
POF FOR MAXIMUM, MINIMUM, AND MEAN TEMPERATURES, RESPECTIVELY. DATA IS
SUMMARIZED BY MONTH FOR ALL YEARS COMBINED. TOTALS ARE GIVEN FOR THE WHOLE
YEAR. DATA IS DISPLAYED USING 5-DEGREE FAHRENHEIT INCREMENTS (GE 0, GE 5,
GE 10, ETC).. THERE IS ONE SPECIAL THRESHOLD FOR "GE 33" DEGREES. MEANS,
STANDARD DEVIATIONS, AND TOTAL OBSERVATION COUNTS ARE GIVEN.

NOTE 1. BEGINNING IN JANUARY 1946, DAILY MAXIMUM AND MINIMUM TEMPERATURES

CAME ROUTINELY FROM HOURLY OBSERVATIONS ON AWS FORMS 10/10A OR FROM AUTOMATED

DATA COLLECTION FROM ALL USAF-OPERATED STATIONS. REFER TO THE "STATION HISTORY"

PAGE FOR DETAILED INFORMATION ON REPORTING PRACTICES.

MONTHLY TEMPERATURES.

ALSO FROM SUMMARY OF DAY DATA, THE TABLES GIVE MONTHLY MAXIMUM AND MINIMUM TEMP-ERATURES BY MONTH AND BY YEAR. MONTHLY RECORD TEMPERATURES (MAX AND MIN) ARE GIVEN, ALONG WITH TOTAL OBSERVATIONS. AN ASTERISK (*) INDICATES A VALUE FOR A MONTH FOR WHICH LESS THAN 90% OF THE DATA ARE AVAILABLE. AN ASTERISK ALSO DENOTES A YEAR(S) WITH ONE OR MORE MISSING AND/OR INCOMPLETE MONTHS.

MEAN MONTHLY TEMPERATURE.

ALSO FROM SUMMARY OF DAY DATA, GIVES MONTHLY MEAN TEMPERATURE BY MONTH, FOR ALL MONTHS, AND FOR ALL YEARS. AN ASTERISK (*) INDICATES A VALUE FOR A MONTH FOR WHICH LESS THAN 90% OF THE DATA ARE AVAILABLE. AN ASTERISK ALSO DENOTES A YEAR(S) WITH ONE OR MORE MISSING AND/OR INCOMPLETE MONTHS.

DRY BULB, WET BULB, AND DEW POINT TEMPERATURES.

THESE TABLES ARE CREATED FROM HOURLY OBSERVATIONS--DATA IS SUMMARIZED:

- BY EIGHT 3-HOUR STANDARD TIME PERIODS FOR EACH MONTH (ALL YEARS COMBINED).
- BY MONTH (ALL YEARS AND ALL HOURS COMBINED).
- BY YEAR (ALL YEARS AND ALL HOURS COMBINED).

MEANS, STANDARD DEVIATIONS, AND TOTAL OBSERVATION COUNTS ARE GIVEN.
THE MEAN NUMBER OF HOURS WITH TEMPERATURES FOR VARIOUS THRESHOLDS ALSO
APPEAR AS SPECIFIED IN EACH SUMMARY AND IN ACCORDANCE WITH AFM 88-29,
"ENGINEERING WEATHER DATA," AND AWSP 105-56, "METEOROLOGICAL TECHNIQUES."

NOTE 1. WINTER WET BULB AND DEW POINT MEAN TEMPERATURES FOR VERY COLD STATIONS MUST BE USED WITH CAUTION. WHEN THE DRY BULB TEMPERATURE IS BELOW -35 DEGREES F, DEW POINT TEMPERATURES ARE NOT REPORTED (FMH-1B). AS A RESULT, WINTER MEAN DEW POINTS (AND MORE FREQUENTLY, WINTER MEAN WET BULB TEMPERATURES) ARE ACTUALLY LOWER THAN SHOWN IN THE TABLES. IN SOME HOUR GROUPS, IN FACT, MEAN WET BULB TEMPERATURES MAY ACTUALLY BE SHOWN AS EXCEEDING THE MEAN DRY BULB TEMPERATURES.

SPECIAL CAVEAT: DURING PART TIME PERIODS, THESE SUMMARIES REPRESENT THE "HIGH" AND "LOW"
TEMPERATURES RECORDED AND NOT NECESSARILY THE ACTUAL MAXIMUM AND MINIMUM VALUES. THESE SUMMARIES
ARE INFLUENCED BY THE ABSENCE OF NIGHTTIME TEMPERATURE READINGS. THEREFORE, CERTAIN SUMMARIES
MAY DEPICT A SLIGHT "WARM" BIAS.

TEMPERATURE CONVERSIONS:

F = 1.8C + 32

C = K - 273.0 (BEFORE 5 APRIL 77) C = K - 273.2 (SINCE 5 APRIL 77)

RELATIVE HUMIDITY--CUMULATIVE PERCENT OCCURRENCE FREQUENCY (POF).

CREATED FROM HOURLY OBSERVATIONS, THESE TABLES GIVE POF OF RELATIVE
HUMIDITY FOR 10% INCREMENTS. MEANS AND TOTAL OBSERVATION COUNTS ARE ALSO PROVIDED.
THE DATA IS SUMMARIZED AS FOLLOWS:

- BY EIGHT 3-HOUR STANDARD TIME PERIODS FOR EACH MONTH (ALL YEARS COMBINED).
- BY MONTH (ALL YEARS AND ALL HOURS COMBINED).
- BY YEAR (ALL YEARS AND ALL HOURS COMBINED).

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE OF MAXIMUM TEMPERATURES IN FAHRENHEIT FROM SUMMARY OF DAY DATA

STATION NUMBER: 106070 STATION NAME: SPANGDAHLEM AB GERMANY PERIOD OF RECORD: 5305-9002

			L	ST TO UT	C: -01					MONT	H: ALL	HOURS:	ALL	
TEMP (DEG		Jan	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
	95 90 85 80 75 70 65 60 55 50 45 40 35 33 30 25 20 15	2.3 13.6 33.2 61.6 72.2 82.8 92.2 96.9 99.7 100.0	.5 3.1 10.1 25.7 46.5 70.6 79.7 89.3 96.7 98.1 99.8 99.9	.5 1.7 6.1 13.2 29.8 56.5 77.2 93.3 96.0 99.2 99.7	.1 .7 3.5 10.2 23.0 41.8 64.1 83.2 95.9 99.8 100.0	.3 1.8 7.4 19.6 33.2 54.6 77.2 92.7 99.1 99.8 100.0	.1 1.8 7.5 19.7 37.2 55.9 80.5 94.1 99.7 100.0	1.5 6.1 16.5 30.3 50.6 71.0 91.9 99.5 100.0	.1 .1 2.8 12.2 26.0 47.5 70.0 93.1 99.5 100.0	.5 2.9 10.0 26.5 47.4 74.4 91.8 99.1 100.0	.4 3.4 9.9 26.0 52.2 77.1 93.1 98.9 99.9	.1 .8 6.4 22.6 47.2 70.4 89.7 93.9 98.3 99.9 100.0	.9 6.4 20.4 42.8 69.9 79.5 89.5 97.0 99.5	.0 .1 1.0 3.4 7.9 15.7 24.9 37.5 48.2 58.6 69.8 80.3 90.3 93.4 96.6 98.8 99.5 100.0 100.0
	••••	36.1	38.9	45.7	53.2	61.3	66.8	70.3	69.6	64.6	55.0	43.8	38.3	53.6
SD		7.51	8.12	7.95	8.52	8.61	8.25	8.35	7.52	7.40	7.23	7.03	7.26	14.57
TOTAL	OBS	1137	1045	1116	1050	1120	1102	1101	1104	1065	1131	1090	1129	13190

•••••	• • • • • • • • • •	• • • • • •		• • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • •		• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	•••••
MEAN	36.1	38.9	45.7	53.2	61.3	66.8	70.3	69.6	64.6	55.0	43.8	38.3	53.6
SD	7.51	8.12	7.95	8.52		8.25	8.35		7.40	7.23	7.03	7.26	14.57
TOTAL OBS	1137	1045	1116	1050	1120	1102	1101	1104	1065	1131	1090	1129	13190

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE OF MINIMUM TEMPERATURES IN FAHRENHEIT FROM SUMMARY OF DAY DATA

STATION NUMBER: 106070 STATION NAME: SPANGDAHLEM AB GERMANY PERIOD OF RECORD: 5305-9002 LST TO UTC: -01 MONTH: ALL HOURS: ALL

JAN												
	FKB	MAR	APR	MAY	JUN	JUL	AUG	SEP	oct	VON	DEC	ann
1.1 6.4 24.5 36.3 55.5 73.0 84.3 92.1 96.7 99.4 99.9	.1 1.6 8.9 27.1 36.4 53.8 75.6 87.0 93.4 97.1 99.0 99.8 100.0	.6 3.9 16.2 46.3 58.1 74.6 90.1 97.0 99.2 99.9	.2 3.5 17.0 38.9 72.7 82.8 93.8 99.7 100.0	.1 .4 7.0 25.0 53.8 80.0 96.1 98.3 99.9 100.0	.8 6.3 24.4 57.5 86.8 97.8 100.0	.1 .1 .6 2.8 16.2 42.7 80.1 96.3 99.8 100.0	.1 1.1 12.4 41.9 78.8 95.7 99.6 100.0	2.5 18.0 49.5 79.2 95.2 99.7 100.0	.2 3.7 16.1 41.0 66.6 91.1 95.1 98.9 100.0	.2 1.7 8.3 25.6 54.9 65.6 82.8 95.3 98.9 100.0	.4 3.6 11.9 33.6 46.4 63.2 81.4 92.1 97.4 99.8 100.0	.0 .0 .1 .4 3.2 11.5 26.1 40.7 53.9 70.5 76.6 85.2 92.9 96.6 98.5 99.5 99.5 99.9
28.6 8.55	29.2 8.59	33.4 6.79	38.3 5.95	45.1 6.15	50.6 5.59	53.8 5.56	53.4 5.20	49.1 5.55	42.8 6.30	35.3 6.54	31.2 7.64	40.9 11.21
	6.4 24.5 36.3 55.5 73.0 84.3 92.1 96.7 99.4 99.9 100.0	1.1 1.6 6.4 8.9 24.5 27.1 36.3 36.4 55.5 53.8 73.0 75.6 84.3 87.0 92.1 93.4 96.7 97.1 99.4 99.0 99.9 99.8 100.0 100.0	1.1 1.6 3.9 6.4 8.9 16.2 24.5 27.1 46.3 36.3 36.4 58.1 55.5 53.8 74.6 73.0 75.6 90.1 84.3 87.0 97.0 92.1 93.4 99.2 96.7 97.1 99.9 99.4 99.0 100.0 99.9 99.8 100.0 100.0	1.1	.4 .2 .7.0 .1 .6 .3.5 25.0 1.1 1.6 3.9 17.0 53.8 6.4 8.9 16.2 38.9 80.0 24.5 27.1 46.3 72.7 96.1 36.3 36.4 58.1 82.8 98.3 55.5 53.8 74.6 93.8 99.9 73.0 75.6 90.1 99.7 100.0 84.3 87.0 97.0 100.0 92.1 93.4 99.2 96.7 97.1 99.9 99.4 99.0 100.0 99.9 99.8 100.0 100.0	28.6 29.2 33.4 38.3 45.1 50.6 8.55 8.59 6.79 5.95 1.1 1.6 6.3 .2 7.0 24.4	.1 .6 .6 .1 .8 2.84 6.3 16.22 7.0 24.4 42.71 .6 3.5 25.0 57.5 80.1 1.1 1.6 3.9 17.0 53.8 86.8 96.3 6.4 8.9 16.2 38.9 80.0 97.8 99.8 24.5 27.1 46.3 72.7 96.1 100.0 100.0 36.3 36.4 58.1 82.8 98.3 55.5 53.8 74.6 93.8 99.9 73.0 75.6 90.1 99.7 100.0 84.3 87.0 97.0 100.0 92.1 93.4 99.2 96.7 97.1 99.9 99.4 99.0 100.0 99.9 99.8 100.0 100.0 100.0 100.0 100.0 100.0 100.0	.1 .6 .1 .1 .8 2.8 1.1 .1 .4 6.3 16.2 12.4 .2 7.0 24.4 42.7 41.9 .1 1.6 3.9 17.0 53.8 86.8 96.3 95.7 6.4 8.9 16.2 38.9 80.0 97.8 99.8 99.6 24.5 27.1 46.3 72.7 96.1 100.0 100.0 100.0 100.0 36.3 36.4 58.1 82.8 98.3 55.5 53.8 74.6 93.8 99.9 73.0 75.6 90.1 99.7 100.0 84.3 87.0 97.0 100.0 92.1 93.4 99.2 96.7 97.1 99.9 99.4 99.0 100.0 99.9 99.8 100.0 1	1.1	1. 1		

OPERATING LOCATION 'A' CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE OF MEAN TEMPERATURES IN FAHRENHEIT USAFETAC, ASHEVILLE NC FROM SUMMARY OF DAY DATA

STAT	ION NUI	9BER: 106		TATION NA		ngdahlem	AB GERMA	W Y			OD OF RE	CORD: 530		
TEM	• • • • • • • • • • • • • • • • • • •	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	NMA
	G-F)	OM	200	Part.	Mr IV	LALL	OOM	301	NOG	UBF	0.1	100	DBC	MIN
						• • • • • • •						•••••		
CE	80							.6	.1					.1
Œ	75					.1	1.1	4.5	1.3	.1				.6
GE	70					1.2	6.4	15.2	10.6	1.5				2.9
GB	65				.6	6.2	19.8	33.8	31.2	9.5	.6			8.5
GE	60			.3	2.6	19.1	43.7	61.2	62.0	33.9	4.6			18.9
Œ	55		.1	1.3	11.1	41.3	73.4	90.4	91.0	66.5	20.3	.7		33.0
GE	50	.3	1.5	7.5	30.1	70.9	93.6	99.6	99.7	91.1	46.7	6.9	1.6	45.7
GE.	45	3.8	9.2	24.8	56.3	91.4	99.7	100.0	100.0	99.2	77.1	24.1	8.8	57.8
Œ	40	18.2	25.2	53.0	83.0	98.7	100.0			100.0	94.7	52.4	27.6	71.0
GE.	35	43.9	51.7	79.3	97.8	100.0			•		99.6	79.4	53.4	83.7
Œ	33	56.6	62.1	85.2	99.5						99.8	87.2	64.9	87.9
Œ	30	71.1	74.7	92.7	99.9						100.0	93.9	78.5	92.5
GE	25	85.3	89.6	99.0	100.0							99.3	92.3	97.1
GTE.	20	92.7	95.8	99.6								100.0	97.9	98.8
Œ	15	97.2	97.9	100.0									99.8	99.6
Œ	10	99.7	99.6										100.0	99.9
Œ	5	100.0	99.9											100.0
Œ	0		100.0											100.0
		1												
••••	•••••	• • • • • • • • • •	•••••	• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • • •	•••••
		22.6	24.2	20.0	46.5	F2 4					40.0		25.0	
MEAN		32.6	34.3	39.9	46.0	53.4	59.0	62.3	61.8	57.1	49.2	39.9	35.0	47.5
an		7.80	0.00	c 00				c 20		E 7.			7.10	40.55
SD		7.80	8.02	6.82	6.64	6.77	6.41	6.39	5.71	5.71	6.14	6.44	7.18	12.57
	7 000	1137	1045	1116	1050	1120		1101	1104	1065		1000		43100
TOTA	L OBS	113/	1042	1116	1050	1120	1101	1101	1104	1065	1131	1090	1129	13189

OPERATING LOCATION 'A' MONTHLY MAXIMUM TEMPERATURES IN FAHRENHEIT USAFETAC, ASHEVILLE NC FROM SUMMARY OF DAY DATA

STATION NUMBER: 106070 STATION NAME: SPANGDAHLEM AB GERMANY PERIOD OF RECORD: 5305-9002

		LST	TO UTC:	-01					MONTH:	ALL H	OURS: AL	L	
YEAR	JAN	FEB	MAR	APR	MAY	Jun	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
53	• • • • • • • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • •	87*	82	81	87	83	70	56	58	87*
54	50	47	63	65	81	84	76	85	80	68	57	51	85
55	48	47	63	79	78	81	86	82	75	66	66	52	86
56	47	40	65	66	83	73	85	78	75	71	51	51	85
57	52	57	63	71	75	90	94	79	76	67	55	48	94
58	50	59	61	63	77	79	81	82	81	63	51	51	82
59	51	60	64	75	78	85	91	86	85	72	59	49	91
60	52	61	61	69	74	85	73	79	73	65	55	48	85
61	49	59	66	71	71	82	84	84	81	71	50	56	84
62	48	45	51	73	75	80	81	83	84	74	58	49	84
63	34	36	53	67	75	73	81	85	75	63	62	44	85
64	41	57	56	69	7 9	85	93	88	81	65	53	47	93
65	47	39	65	63	78	83	81	79	72	67	57	52	83
66	51	58	57	68	79	84	80	88	79	74	56	49	88
67	51	51	56	68	79	83	86	81	77	70	52	50	86
68	49	45	72	81	74	81	88	76	72	67	61*	44*	88*
69	49*	49	58	72*	83*	76*	88*	85	77*	69*	56*	38	88*
70	47	49	52	59*	72	83	84	85	76	72	59	51	85*
71	49	47	52	76	79	76	90*	88*	74*	68*	54	54	90*
72	47	54	65	68	72	83	88	80	73	68	60	51	88
73	44	42	54	66	73	86	87	86	87	71	57	48	87
74	51	51	62	68	71	75	78	87	78	50	53	53	87
75	53	51	55	71	69	82	84	86	77	57	53	44	86
76	48	51	59	66	78	89	91	82	73	71	55	44	91
77	51	57	62	64	73	86	84	78	73	68	59	57	86
78	46	55	57	64	73	78	87	80	71	69	50	51	87
79	37	44	50	66	80	80	82	80	77	77	54	54	82
80	46	52	57	70	70	79	82	84	75	59	54	52	84
81	46	46	64	73	79	81	81	84	73	64	57	46	84
82	48	50	61	70	82	88	90	82	84	63	55	52	90
83	52	46	55	66	73	82	93	86	77	72	57	52	93
84	48	46	54	72	70	81	88*			64	57	46	88*
85	46	54	54	73	82	· 82	93	86	81	79	64	57	93

PERATING LOCATION 'A' MONTHLY MAXIMUM TEMPERATURES IN FAHRENHEIT MARKET NO. ASHEVILLE NO.

FTATION NUMBER: 106070 STATION NAME: SPANGDAHLEM AB GERMANY PERIOD OF RECORD: 5305-9002 LST TO UTC: -01 MONTH: ALL HOURS: ALL

				-01								_	
(EAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	oct	nov	DEC	ANNUAL
86	54	41	61	63	79	88	86	95	73	73	63	55	95
87	50	48	52	73	73	88	82	88	86	64	55	54	88
88	48	46	55	73	79	79	84	88	75	68	54	52	88
89	48	52	73	64	79	81	90	84	77	68	54	59	90
90	50	63											63*
		•••••	• • • • • • • •	• • • • • • •	•••••	•••••	•••••	• • • • • • • •	• • • • • • • •	•••••	•••••	•••••	••••••
GREATEST	54	63	73	81 8	7 90	94	95	87	79	66	59	95	

TOTAL OBS 1137 1045 1116 1050 1120 1102 1101 1104 1065 1131 1090 1129 13190

THE GREATEST VALUE OF 95 OCCURRED ON 08/03/86

NOTE: *THE VALUE IS BASED ON A MONTH WITH LESS THAN 90% OF THE DATA AVAILABLE FOR THE MONTH

E - 3 - 1B

MONTHLY MINIMUM TEMPERATURES IN FAHRENHEIT FROM SUMMARY OF DAY DATA

STATION NUMBER: 106070 STATION NAME: SPANGDAHLEM AB GERMANY PERIOD OF RECORD: 5305-9002 MONTH: ALL HOURS: ALL LST TO UTC: -01 jan feb MAR APR JUN JUL AUG SEP OCT NOV DEC ANNUAL 42* 21* -3 -3 -3 23* 10* -3* 26* 28* 35* 42* 48* 39* 35* 26* 9* 33* 10* 44* 55* 46* 33* 7* 39* 18*

ERATING LOCATION 'A' AFETAC, ASHEVILLE NC

MONTHLY MINIMUM TEMPERATURES IN FAHRENHEIT

FROM SUMMARY OF DAY DATA

MITION NUMBER: 106070 STATION NAME: SPANGDAHLEM AB GERMANY PERIOD OF RECORD: 5305-9002 LST TO UTC: -01 MONTH: ALL HOURS: ALL

		• • • • • • • •				• • • • • • •							
AR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
36	12	5	19	21	37	41	45	43	37	30	25	16	5
87	3	12	10	27	32	41	43	41	37	36	25	12	3
B8	27	25	19	28	36	41	46	48	41	32	18	27	18
89	23	25	28	34	34	41	46	45	41	34	19	21	19
90	25	28											25*

...... AST -3 -3 9 21 28 35 39 38 34 25 16 TAL OBS 1137 1045 1116 1050 1120 1102 1101 1104 1065 1131 1090 1129 13190

THE LEAST VALUE OF -3 OCCURRED ON 02/01/56

NOTE: *THE VALUE IS BASED ON A MONTH WITH LESS THAN 90% OF THE DATA AVAILABLE FOR THE MONTH

E - 3 - 2B

MONTHLY MEAN TEMPERATURES IN FAHRENHEIT FROM SUMMARY OF DAY DATA

STATION NUMBER: 106070 STATION NAME: SPANGDAHLEM AB GERMANY PERIOD OF RECORD: 5305-9002 MONTH: ALL HOURS: ALL LST TO UTC: -01 jan feb mar APR JUL AUG SEP OCT NOV DEC ANNUAL YEAR MAY 63* 39* 31* 47* 47* 69* 59* 51* 41* 47* 38* 56* 58* 44* 48* 69* 69* 60* 53* 49* 58* 44*

ERATING LOCATION 'A'
AFETAC, ASHEVILLE NC

MONTHLY MEAN TEMPERATURES IN FAHRENHEIT

FROM SUMMARY OF DAY DATA

'ATION NU	MBER: 10607	LST	TO UTC:	-01	DAHLEM A		-		MONTH:		OURS: AL	L	
AR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	VOV	DEC	ANNUAL
86	36	25	40	42	56	63	64	64	55	53	44	37	49
87 88	25 38	33 36	34 40	48 47	48 57	56 60	62 62	61 65	62 58	49 53	39 40	35 41	46 50
89	37	37	47	47	58	59	64	64	58	51	40	39	50
90	38	44											41*

EAN 32.6 34.3 39.9 46.0 53.4 59.0 62.3 61.8 57.1 49.2 39.9 35.0 47.5

XTAL OBS 1137 1045 1116 1050 1120 1101 1101 1104 1065 1131 1090 1729 13189

NOTE: *THE VALUE IS BASED ON A MONTH WITH LESS THAN 90% OF THE DATA AVAILABLE FOR THE MONTH

E - 4 - 1B

7.073

7.656

21-23

ALL HOURS 32.4

32.7

DRY BULB TEMPERATURE SUMMARY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: JAN HOURS MEAN NUMBER OF HOURS WITH TEMPERATURES DEG F TOTAL MEAN STANDARD TOTAL LST DEVIATION OBS LE 0 LE 32 GE 65 GE 80 GE 93 00-02 31.8 8.504 03-05 31.3 8.752 O n n 06-08 31.0 8.859 09-11 31.8 8.573 12-14 34.0 7.838 15-17 34.4 7.785 18-20 8.075 33.2 21-23 32.2 8.339 ALL 8.370 HOURS 32.5 MONTH: FEB 7.537 00-02 31.3 03-05 30.5 8.030 O 06-08 29.9 8.200 09-11 31.7 7.403 12-14 35.4 6.620 15-17 36.5 6.614 18-20 34.0 6.774

E - 5 - 1 - 1

DRY BULB TEMPERATURE SUMMARY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: MAR

		rs.	r to orc: -	1		MONTH	: MAR			
Hours Lst	MEAN	STANDARD DEVIATION	TOTAL OBS	MEAI	TE 0	OF HOUR	S WITH	TEMPERATU GE 80	RES DEG F GE 93	TOTAL HOURS
00-02	37.5	6.494	930	••••••••	0	197	0	0	0	930
03-05	36.4	6.788	930	•	0	258	0	0	0	930
06~08	36.0	6.988	930		0	281	0	0	0	930
09-11	39.3	6.554	930		0	119	0	0	0	930
12-14	43.5	6.879	930		. 0	25	10	0	0	930
15-17	44.6	7.220	930		0	18	12	0	0	930
18-20	41.7	6.906	929		0	70	5	0	0	929
21-23	39.2	6.367	930		0	126	0	0	0	930
ALL HOURS	39.8	7.381	7439		0	1094	27	0	0	7439
						MONTH	: APR			
00-02	42.2	6.191	900	• • • • • • • • • • • • • • • • • • • •	0	40	0	0	0	900
03-05	40.5	6.094	900		0	93	0	0	o	900
06-08	40.8	5.974	900		0	69	0	0	0	900
09-11	46.5	7.330	900		0	15	6	0	0	900
12-14	50.9	8.655	900		0	5	58	0	0	900
15-17	51.6	8.903	900		0	2	72	0	0	900
18-20	48.6	8.046	900		0	8	19	0	0	900
21-23	44.7	6.795	900		0	20	0	0	0	900
ALL HOURS	45.7	8.431	7200		0	252	155	0	0	7200

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DRY BULB TEMPERATURE SUMMARY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: MAY

		LST	TO UTC: -	- 1 MONTH: MAY	
HOURS LST	MEAN	STANDARD DEVIATION	TOTAL OBS	LE 0 LE 32 GE 65 GE 80 GE 93 HO	TAL URS
00-02	49.2	6.442	930		930
03-05	47.1	6.178	930	0 7 0 0 0	930
06-08	48.9	6.468	930	0 1 4 0 0	930
09-11	54.9	7.840	930	0 0 92 0 0	930
12-14	58.9	8.961	930	0 0 231 5 0	930
15-17	59.9	9.191	930	0 0 273 10 0	930
18-20	57.0	8.492	930	0 0 170 3 0	930
21-23	52.1	7.114	930	0 0 30 0 0	930
ALL HOURS	53.5	8.887	7440	0 8 802 18 0 7	440
				Month: Jun	
00-02	53.8	6.057	900	0 0 41 0 0	900
00-02	33.6	6.057	900	0 0 41 0 0	900
03-05	51.8	5.718	900	0 0 10 0 0	900
06-08	54.1	6.223	900	0 0 47 0 0	900
09-11	60.1	7.876	900	0 0 221 9 0	900
12-14	63.9	8.871	900	0 0 365 53 0	900
15-17	64.5	9.085	900	0 0 367 69 0	900
18-20	61.9	8.322	900	0 0 278 24 0	900
21-23	57.0	6.757	900	0 0 116 0 0	900
ALL HOURS	58.4	8.786	7200	0 0 1445 155 0 7	200

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DRY BULB TEMPERATURE SUMMARY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDARLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

			STATION NAME: LST TO UTC: -	- 1				MONTH:	JUL	ECORD: 3			
Hours LST	MEAN	STANDARD DEVIATION	ON OBS		MEAN	NUMBER LE 0	OF	HOURS	WITH	TEMPERA	rures Ge	DEG F 93	TOTAL HOURS
00-02	58.0		840	• • • • • • • • • • •		0	•••	0	86			0	840
03-05	55.9	5.496	840			0		0	42	0		0	840
06-08	57.9	5.964	858			0		0	100	0		0	858
09-11	64.7	7.576	858			0		0	371	30		0	858
12-14	69.0	8.619	858			0		o	541	103		0	858
15-17	70.3	8.864	857			0		0	590	155		3	857
18-20	67.1	7.877	856			0		0	466	60		0	856
21-23	61.4	6.220	849			0		0	225	3		0	849
ALL BOURS	63.1	8.782	6816			0		0	2421	351		3	6816
•••••	•	•	•••••		•••••		•••	MONTH:	AUG	• • • • • • •	• • • • •	• • • • • •	•••••
00-02	57.7	5.619	837	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	0	• • •	0	63	0	• • • • •	0	837
03-05	55.6	5.523	837			0		0	25	0		0	837
06-08	56.7	5.564	837			0		0	46	0		o	837
09-11	63.9	6.848	837			0		0	326	13		0	837
12-14	69.0	7.616	836			0		0	540	80		2	836
15-17	70.0	7.842	837			0		0	565	114		3	837
18-20	66.5	7.468	837			0		0	438	42		0	837
21-23	61.0	6.097	837			0		0	188	1		0	837
ALL BOURS	62.6	8.506	6695			o		0	2191	250		5	6695
*****	• • • • • • • •	• • • • • • • • • •	••••••	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	•:••••	• • •	•••••	• • • • •	• • • • • • •	• • • • •	• • • • • • •	•••••

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15-17

18-20

21-23

ALL HOURS 53.7

50.2

48.2

49.2

6.898

6.239

6.205

7.158

DRY BULB TEMPERATURE SUMMARY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: SEP MEAN STANDARD MEAN NUMBER OF HOURS WITH TEMPERATURES DEG F TOTAL HOURS TOTAL LST DEVIATION OBS LE 0 LE 32 GE 65 GE 80 GE 93 HOURS 00-02 53.8 5.617 5.955 03-05 52.0 n 06-08 51.8 5.999 09-11 58.1 6.123 12-14 63.6 7.084 64.7 7.351 15-17 60.4 18-20 6.266 21-23 56.2 5.442 HOURS 57.6 7.800 MONTH: OCT 6.359 00-02 46.9 03-05 46.1 6.496 06-08 45.7 6.589 09-11 49.1 6.483 12-14 53.4 6.809

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DRY BULB TEMPERATURE SUMMARY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY

PERIOD OF RECORD: JAN 80 - DEC 89 MONTH: NOV

LST TO UTC: - 1

TOTAL BOURS Mean Standard MEAN NUMBER OF HOURS WITH TEMPERATURES DEG F TOTAL LST DEVIATION OBS LE 0 LE 32 GE 65 GE 80 GE 93 HOURS 00-02 38.5 7.697 869 0 206 37.9 7.836 03-05 871 0 226 0 0 0 871 37.4 8.053 876 06-08 ٥ 248 Ω 0 0 876 09-11 39.2 7.684 885 181 a 0 0 0 885 42.4 7.442 12-14 884 0 87 0 0 0 884 15-17 42.5 7.457 884 89 0 0 0 0 884 7.215 18-20 40.2 871 0 140 0 0 0 7.487 39.0 21-23 867 191 0 0 0 867 ALL HOURS 39.7 7.813 7007 1368 0 7007

						MONTH:	DEC			
00-02	35.4	7.470	880	• • • • • • • • • • • • • • • • • • • •	0	317	0	0	0	880
03-05	35.1	7.638	886		0	327	0	0	0	886
06-08	34.8	7.641	892		0	332	0	0	0	892
09-11	35.4	7.229	902		. 0	313	0	0	0	902
12-14	37.4	7.000	904		0	232	0	0	0	904
15-17	37.4	6.942	900		0	233	0	0	0	900
18-20	36.3	7.097	870		0	264	0	0	0	870
21-23	35.8	7.376	870		0	290	0	0	0	870
ALL HOURS	36.0	7.396	7104		0	2308	0	o	o	7104

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DRY BULB TEMPERATURE SUMMARY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070

STATION NAME: SPANDAHLEM AB/GERMANY

PERIOD OF RECORD: JAN 80 - DEC 89

TO UTC: - 1 MONTH: A	IL.

HOURS LST	MEAN	STANDARD DEVIATION	TOTAL OBS	MEAN	NUMBER	OF HOUR	S WITH GE 65	TEMPERATU GE 80	RES DEG F GE 93	TOTAL HOURS
00-02	44.5	11.502	10567		0	1675	209	0	0	10567
03-05	43.2	11.112	10589		0	1887	89	0	o	10589
06-08	43.6	11.832	10645		0	1944	203	0	o	10645
09-11	47.7	13.827	10669		0	1545	1127	52	0	10669
12-14	51.6	14.653	10669		0	990	2109	253	2	10669
15-17	52.3	14.903	10662		0	893	2299	367	6	10662
18-20	49.6	14.134	10599		0	1200	1558	130	0	10599
21-23	46.5	12.391	10588		0	1478	610	4	0	10588
ALL HOURS	47.4	13.534	84988		0	11612	8204	806	8	84988

WET BULB TEMPERATURE SUMMARY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

SIRITOR	norden.		LST TO UTC: -	1		MONTH:		CORD:	JAN 60 -	DEC 03
HOURS	MEAN	STANDARD	TOTAL	MEAN			WITH	TEMPERA	TURES DE	F TOTAL
LST		DEVIATIO	n obs		LE 32	GE 50	GE 67	GE 73	GE 80	HOURS
00-02	30.1	8.154	917		555	0	0	0	0	917
03-05	29.7	8.364	921		567	1	0	0	0	921
06-08	29.4	8.548	924		567	0	0	0	. 0	924
09-11	30.1	8.281	924		558	0	0	o	0	924
12-14	31.9	7.579	923		460	0	0	0	0	923
15-17	32.1	7.478	924		446	3	0	o	0	924
18-20	31.2	7.764	917		490	3	0	0	0	917
21-23	30.5	8.025	918		548	1	o	o	0	918
ALL										
HOURS	30.6	8.079	7368		4191	8	0	0	0	7368
•••••		•••••	• • • • • • • • • • • • •		* * * * * * * *	• • • • • • • •	• • • • • •	• • • • • • •	• • • • • • • •	• • • • • • • • • •
		• • • • • • • • • • •				MONTH	FEB	• • • • • • •	• • • • • • • •	
00-02	29.2	7.604	849		554	0	0	0	0	849
03-05	28.5	7.943	849		571	0	0	0	0	849
06-08	28.0	8.099	849		594	0	0	0	0	849
09-11	29.4	7.362	849		537	0	0	0	0	849
12-14	32.2	6.555	849		441	2	0	0	0	849
15-17	32.8	6.515	849		421	3	0	0	0	849
18-20	31.1	6.932	849		476	3	0	0	0	849
21-23	30.0	7.271	849		523	3	0	0	0	849
ALL										
HOURS	30.1	7.488	6792		4117	11	0	0	0	6792

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WET BULB TEMPERATURE SUMMARY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

STATION	NOMBEK:		LST TO UTC: -	· 1	1		H: MAR	scoru: c	JAN 80 - D	BC 69
Hours Lst	Mean	STANDARD DEVIATIO	n obs		AN NUMBER LE 32			TEMPERAT	CURES DEG GE 80	HOURS
00-02	35.1	6.415		••••••	294	15	0	0	0	930
03-05	34.2	6.689	930		357	12	0	0	0	930
06-08	34.0	6.880	930		374	13	0	0	0	930
09~11	36.5	6.281	930		233	25	0	0	0	930
12-14	39.1	6.037	930		121	50	0	0	0	930
15~17	39.6	6.015	930		113	49	0	0	0	930
18~20	37.8	6.203	929	•	178	37	0	0	0	929
21-23	36.2	6.212	930		244	23	0	0	0	930
ALL HOURS	36.6	6.661	7439		1914	224	0	0	0	7439
						MONT	H: APR			
00-02	38.8	5.744	900	•••••	124	40	0		0	900
03~05	37.7	5.814	900		164	26	0	0	0	900
06-08	38.0	5.670	900		151	26	0	0	0	900
09-11	41.7	6.033	900		41	105	0	0	0	900
12-14	44.0	6.306	899		16	196	0	0	0	899
15-17	44.1	6.244	899		17	209	0	0	0	899
18-20	42.5	5.995	900		30	127	0	0	0	900
21-23	40.4	5.775	900		71	60	0	0	o	900
ALL HOURS	40.9	6.447			614	789	0	0	0	7198

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WET BULB TEMPERATURE SUMMARY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: MAY

		LS	r to utc: -	1		MONTH	: MAY			
Hours Lst	MEAN	STANDARD DEVIATION	TOTAL OBS		LE 32	GE 50	S WITH GE 67	TEMPERATURE	DEG F	TOTAL HOURS
00-02	45.9	5.812	930		5	268		0		930
0002	43.3	3.012	330		•	200	·	v	•	330
03-05	44.5	5.790	930		19	200	0	0	0	930
06-08	45.9	5.805	930		9	264	0	0	0	930
09-11	49.4	6.170	929		0	481	0	0	0	929
12-14	51.2	6.313	930		0	562	1	0	0	930
15-17	51.4	6.244	930		0	577	2	0	0	930
18-20	50.1	6.218	930		0	504	0	0	0	930
21-23	47.6	5.949	930		0	366	0	0	0	930
ALL HOURS	48.2	6.484	7439		33	3222	3	0	0	7439
						MONTH	: JUN			
00-02	50.9	5.370	900	••••••••••	0	507	3	0	0	900
03-05	49.5	5.252	900		o	429	1	o	0	900
06-08	51.2	5.464	900		0	532	4	0	0	900
09-11	54.5	5.971	900		0	708	29	1	0	900
12-14	55.9	6.172	900		0	761	46	4	0	900
15-17	56.1	6.013	900		0	771	43	4	0	900
18-20	55.0	5.880	900		0	738	31	1	0	900
21-23	52.8	5.551	900		0	622	9	0	0	900
ALL HOURS	53.2	6.139	7200		0	5068	166	10	0	7200

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WET BULB TEMPERATURE SUMMARY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: JUL HOURS MEAN STANDARD TOTAL MEAN NUMBER OF HOURS WITH TEMPERATURES DEG F TOTAL LST OBS DEVIATION LE 32 GE 50 GE 67 GE 73 GE 80 HOURS 54.7 4.736 840 00-02 03-05 5.014 53.5 06-08 54.8 4.922 09-11 58.3 5.065 59.7 5.101 12-14 15-17 60.2 4.912 18-20 59.0 4.752 21-23 56.5 4.580 ALL HOURS 57.1 5.483 MONTH: AUG 00-02 54.5 4.859 03-05 53.1 5.076 06-08 53.9 4.919 09-11 58.0 4.859 12-14 59.7 4.909 15-17 60.0 4.826 18-20 58.7 4.967 21-23 56.3 4.859 ALL HOURS 56.8 5.543

E-5-2-4

WET BULB TEMPERATURE SUMMARY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: SEP

		LST	r to utc: -	1	MONTH	: SEP			
HOURS LST	MEAN	STANDARD DEVIATION	TOTAL OBS						
00-02	51.0	5.272	810	·····	506	0	0	0	810
03-05	49.6	5.536	815	0	439	0	0	0	815
06-08	49.4	5.643	823	0	430	0	0	0	823
09-11	53.7	5.103	824	0	658	4	0	0	824
12-14	56.2	5.187	825	0	753	22	0	0	825
15-17	56.5	5.301	821	0	744	26	0	0	821
18-20	54.7	5.235	810	0	676	8	0	0	810
21-23	52.5	5.105	810	0	589	o	0	o	810
ALL HOURS	53.0	5.915	6538	0	4795	60	0	0	6538
					MONTH	: OCT			
00-02	44.5	6.177	905	26	214	0	0	0	905
03-05	43.8	6.388	910	51	179	0	0	0	910
06-08	43.5	6.364	926	59	170	0	0	0	926
09-11	46.1	5.905	930	12	276	0	0	o	930
12-14	48.6	5.790	930	3	389	0	0	0	930
15-17	48.8	5.924	930	3	399	0	0	0	930
18-20	46.7	5.828	930	3	304	0	0	0	930
21-23	45.4	5.986	928	10	253	0	0	0	928
ALL HOURS	45.9	6.319	7389	167	2184	0	0	0	7389

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WET BULB TEMPERATURE SUMMARY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: NOV

		201	. 10 010.	-						
Hours Let	MEAN	STANDARD DEVIATION	TOTAL OBS	MEAN	NUMBER LE 32		RS WITH GE 67	TEMPERAT GE 73	URES DEG GE 80	F TOTAL HOURS
00-02	36.7	7.594	869		275	41	0	0	0	869
03-05	36.2	7.702	871		300	28	o	0	0	871
06~08	35.8	7.870	876		317	24	0	0	0	876
09~11	37.3	7.567	885		252	43	0	0	0	885
			884		166	79		0	0	
12-14	39.6	7.255	884		100	79	0	Ü	U	884
15~17	39.6	7.273	884		168	88	0	0	0	884
18-20	37.9	7.185	871		219	39	0	0	0	871
21-23	37.0	7.406	867		267	42	0	0	0	867
ALL HOURS	37.5	7.592	7007		1964	384	0	o	0	7007
• • • • • •	• • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	•••••	•••••	• • • • • • •	•••••	• • • • • • •	• • • • • • • •	•••••	• • • • • • • • •
				•••••		MONT	H: DEC			
00-02	33.7	7.344	880		392	MONT	H: DEC	0	0	880
00-02	33.7	7.344 7.488	88Q 886		392 405			0	0	880
	1					11	0			
03-05	33.4	7.488	886	•••••••••••	405	11 9	0	o	0	886
03-05 06-08	33.4	7.488 7.485	886 892	••••••••••••	405 407	11 9 6	o o o	0	0	886 892
03-05 06-08 09-11	33.4 33.1 33.6	7.488 7.485 7.049	886 892 901		405 407 393	9 6	0 0 0	o o o	o o o	886 892 901
03-05 06-08 09-11 12-14	33.4 33.1 33.6 35.2	7.488 7.485 7.049 6.658	886 892 901 903	•••••••••••••••••••••••••••••••••••••••	405 407 393 304	11 9 6 6	0 0 0	0	0 0	886 892 901 903
03-05 06-08 09-11 12-14 15-17	33.4 33.1 33.6 35.2 35.2	7.488 7.485 7.049 6.658 6.650	886 892 901 903 900		405 407 393 304 317	11 9 6 6 9	0 0 0	0 0	0 0	886 892 901 903 900
03~05 06~08 09~11 12~14 15~17 18~20 21~23	33.4 33.1 33.6 35.2 35.2 34.4	7.488 7.485 7.049 6.658 6.650 6.948	886 892 901 903 900 870		405 407 393 304 317 349	11 9 6 6 9 11	0 0 0 0 0 0 0 0	0 0 0	0 0 0	886 892 901 903 900 870
03-05 06-08 09-11 12-14 15-17 18-20	33.4 33.1 33.6 35.2 35.2 34.4	7.488 7.485 7.049 6.658 6.650 6.948	886 892 901 903 900 870 870		405 407 393 304 317 349	11 9 6 6 9 11	0 0 0 0 0 0 0 0	0 0 0	0 0 0	886 892 901 903 900 870

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WET BULB TEMPERATURE SUMMARY FROM HOURLY OBSERVATIONS

MTION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: ALL

		100	10 010 1			PONTI				
urs St	MEAN	STANDARD DEVIATION	TOTAL OBS	ME	AN NUMBER LE 32	OF HOUR	S WITH GE 67	TEMPERATU GE 73	RES DEG F GE 80	TOTAL HOURS
-02	41.9	10.938	10567	• • • • • • • • • • • • • • • • • • • •	2225	3021	4	0	0	10567
-05	41.0	10.783	10589		2434	2638	2	0	0	10589
-08	41.3	11.271	10645		2478	2886	8	0	0	10645
-11	43.9	12.017	10667		2026	3948	109	1	o	10667
-14	45.9	11.773	10667		1511	4482	229	7	o	10667
-17	46.2	11.755	10661		1485	4542	242	5	0	10661
-20	44.8	11.769	10599		1745	4105	133	1	o	10599
-23	43.1	11.263	10588		2021	3523	27	0	o	10588
LL URS	43.5	11.611	84983		15925	29145	754	14	0	84983

DEW POINT TEMPERATURE SUMMARY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

		LST	r to utc: -	1 MONTH: JAN	
HOURS LST	MEAN	STANDARD DEVIATION	TOTAL OBS	MEAN NUMBER OF HOURS WITH TEMPERATURES DEG F LE 27 GE 37 LE 55 GE 65	Hours
00-02	26.8	9.085	917	455 111 917 0	917
03-05	26.5	9.346	921	46C 119 921 O	921
06-08	26.3	9.542	924	458 112 924 0	924
09-11	26.8	9.358	924	456 119 924 0	924
12-14	28.1	8.908	923	398 150 923 0	923
15-17	28.2	8.874	924	383 150 924 0	924
18-20	27.5	8.970	917	419 125 917 0	917
21-23	27.1	8.971	918	453 113 918 0	918
ALL HOURS	27.2	9.176	7368	3482 999 7368 0	7368
				MONTH: FEB	•••••
00-02	24.7	9.746	849	495 101 849 0	849
03-05	24.2	9.813	849	505 88 849 0	849
06-08	23.8	9.884	849	508 79 849 0	849
09-11	24.8	9.391	849	487 86 849 0	849
12-14	26.3	9.164	849	448 111 849 0	849
15-17	26.4	9.424	849	449 131 849 0	849
18-20	25.6	9.614	849	456 106 849 0	849
21-23	25.1	9.705	849	482 103 849 0	849
ALL HOURS	25.1	9.659	6792	3830 805 6792 0	6792

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DEW POINT TEMPERATURE SUMMARY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

STATION	NUMBER:		STATION NAME: LST TO UTC: -	1			MONT	DO OF RI	ECORD: JAN 8) - DEC 89
Hours LST	mean	DEVIATIO	N OBS	• • • • • • • • • • •	MEAN	NUMBER			TEMPERATURES GE 65	DEG F TOTAL HOURS
00-02	31.2	7.982	930	• • • • • • • • • • •		275	222	930	0	930
03-05	30.7	8.111	930			290	206	930	0	930
06-08	30.8	8.238	930			290	209	930	0	930
09-11	32.4	7.848	930			243	281	930	0	930
12-14	33.3	7.928	930			214	330	930	0	930
15-17	32.9	8.009	930			229	331	930	0	930
18-20	32.3	8.031	929			249	289	929	0	929
21-23	31.8	7.871	930			258	242	929	0	930
ALL BOURS	31.9	8.080	7439			2048	2110	7438	0	7439
						•	MONT	i: APR		
•••••	• • • • • • •		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •			• • • • • •	• • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •
00-02	34.4	7.296	900			167	343	900	0	899
03-05	33.8	7.176	900			176	322	900	0	899
06-08	34.2	7.011	900			173	351	900	0	899
09-11	36.0	7.296	900			119	453	900	0	899
12-14	36.0	7.445	899			125	424	899	σ	899
15-17	35.6	7.209	899			125	413	899	0	899
18-20	35.2	7.237	900			137	389	900	O	899
21-23	34.9	7.314	900			144	363	900	0	899
ALL HOURS	35.0	7.323	7198			1166	3058	7198	0	7198

DEW POINT TEMPERATURE SUMMARY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

		LST	TO UTC: -	MONTH: MAY	
HOURS LST	MEAN	STANDARD DEVIATION	TOTAL OBS	MEAN NUMBER OF HOURS WITH TEMPERATURES DEG F LE 27 GE 37 LE 55 GE 65	HOURS
00-02	42.6	6.657	930	12 762 927 0	930
03-05	41.9	6.636	930	21 736 927 0	930
06-08	43.0	6.521	930	13 772 921 0	930
09-11	44.4	6.816	929	22 801 913 0	929
12-14	44.0	7.110	930	20 790 916 0	930
15-17	43.8	7.027	930	19 779 909 0	930
18-20	43.6	7.084	930	14 759 911 0	930
21-23	43.1	6.825	930	8 767 923 0	930
ALL HOURS	43.3	6.906	7439	129 6166 7347 0	7439
				Month: Jun	•••••
00-02	48.4	5.665	900	0 888 820 3	900
03-05	47.6	5.596	900	0 891 843 3	900
06-08	48.9	5.601	900	0 898 800 3	900
09-11	50.0	6.315	900	0 894 764 12	900
12-14	49.6	6.599	900	0 885 758 19	900
15-17	49.5	6.498	900	0 887 769 15	900
18-20	49.6	6.470	900	0 887 770 11	900
21-23	49.3	6.019	900	0 891 779 4	900
ALL HOURS	49.1	6.191	7200	0 7121 6303 70	7200

E-5-3-3

DEW POINT TEMPERATURE SUMMARY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 MONTH: JUL

		LST	TO UTC: - 1	1 MONTH: JUL	
Hours Lst	MEAN	STANDARD DEVIATION	TOTAL OBS	MEAN NUMBER OF HOURS WITH TEMPERATURES DEG F LE 27 GE 37 LE 55 GE 65	HOURS
00-02	52.2	5.006	840	0 840 671 0	840
03-05	51.6	5.215	840	0 839 693 0	840
06-08	52.5	5.047	858	0 858 672 0	858
09-11	53.7	5.234	858	0 858 607 2	858
12-14	53.2	5.296	858	0 858 627 8	858
15-17	53.1	5.271	857	0 857 633 12	857
18-20	53.2	5.082	856	0 856 632 10	856
21-23	52.8	4.874	849	0 849 663 3	849
ALL			5016	0 6815 5198 35	6816
HOURS	52.8	5.214	6816	0 0013 3130 33	
HOURS		••••••	• • • • • • • • • • • •	MONTH: AUG	•••••
90-02		5.214	• • • • • • • • • • • •	••••••••••••••••••••••••	836
•••••		••••••		MONTH: AUG	
00-02	52.1	5.055	837	MONTH: AUG 0 837 645 0	836
00-02	52.1	5.055	837 837	MONTH: AUG 0 837 645 0 0 837 680 1	836
00-02 03-05 06-08	52.1 51.3 51.9	5.055 5.138 4.968	837 837 837	MONTH: AUG 0 837 645 0 0 837 680 1 0 837 677 0	836 836 836
00-02 03-05 06-08 09-11	52.1 51.3 51.9 53.7	5.055 5.138 4.968 5.043	837 837 837 837	MONTH: AUG 0 837 645 0 0 837 680 1 0 837 677 0 0 837 565 1	836 836 836 836
00-02 03-05 06-08 09-11 12-14	52.1 51.3 51.9 53.7 53.1	5.055 5.138 4.968 5.043 5.537	837 837 837 837 836	MONTH: AUG 0 837 645 0 0 837 680 1 0 837 677 0 0 837 565 1 0 836 571 4	836 836 836 836
00-02 03-05 06-08 09-11 12-14 15-17	52.1 51.3 51.9 53.7 53.1 52.9	5.055 5.138 4.968 5.043 5.537 5.672	837 837 837 837 836 837	MONTH: AUG 0 837 645 0 0 837 680 1 0 837 677 0 0 837 565 1 0 836 571 4 0 837 580 4	836 836 836 836 836

E-5-3-4

DEW POINT TEMPERATURE SUMMARY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 MONTH: SEP LST TO UTC: - 1 MEAN STANDARD TOTAL MEAN NUMBER OF HOURS WITH TEMPERATURES DEG F TOTAL HOURS LST DEVIATION OBS LE 27 GE 37 LE 55 GE 65 HOURS 00-02 48.6 5.734 810 0 796 736 0 810 03-05 47.6 5.799 0 792 766 815 0 815 06-08 47.5 5.931 823 0 792 769 0 823 09-11 50.2 5.528 824 0 823 691 0 824 50.4 6.358 825 12-14 825 0 811 683 1 15-17 50.0 6.661 821 0 803 690 5 821 18-20 50.1 6.412 810 0 790 692 810 21-23 49.5 5.873 810 796 705 810 ALL HOURS 49.2 6.169 6538 6403 5732 6538 MONTH: OCT 00-02 6.892 905 708 899 0 03-05 41.5 7.003 910 34 694 906 0 930 06-08 41.3 6.995 926 39 704 923 0 930 09-11 43.1 6.392 930 8 791 915 0 930 12-14 44.2 6.526 930 816 908 0 930 15-17 44.0 6.871 930 6 800 899 0 930 18-20 43.3 6.783 930 12 784 912 0 930 6.782 21-23 42.6 928 752 16 918 0 930 ALL 42.7 HOURS 6.891 7389 140 6049 7280 0 7389

E-5-3-5

DEW POINT TEMPERATURE SUMMARY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

		LSI	TO UTC: -	1		MONTH	: NOV		
Hours LST	MEAN	STANDARD DEVIATION	TOTAL OBS		LE 27		S WITH	TEMPERATURES DEG GE 65	F TOTAL HOURS
00-02	34.0	8.654	869	•••••	219	352	869	0	869
03-05	33.6	8.777	871		228	353	871	0	871
06-08	33.3	8.963	876		235	341	876	0	876
09-11	34.5	8.782	885		203	379	885	0	885
12-14	35.9	8.792	884		164	460	884	0	884
15-17	35.7	8.803	884		181	439	884	0	884
18-20	34.8	8.485	871		191	380	871	0	871
21-23	34.1	8.614	867		214	350	867	0	867
ALL HOURS	34.5	8.801	7007		1635	3054	7007	o	7007
•••••		•••••		••••••	•••••	MONTH	· nec		••••••
							. DBC	• • • • • • • • • • • • • • • • • • • •	
00-02	30.7	8.581	880		281	232	880	0	903
03-05	30.5	8.736	886		300	237	886	0	903
06-08	30.3	8.654	892		305	232	892	0	903
09-11	30.7	8.151	901		298	235	901	o	903
12-14	31.8	7.804	903		.244	274	903	o	903
15-17	31.8	7.903	900		255	266	900	0	903
18-20	31.3	8.205	870		270	237	870	0	903
21-23	31.1	8.470	870		276	245	870	0	903
ALL HOURS	31.0	8.357	7102	•••••	2229	1958	7102	0	7102

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DEW POINT TEMPERATURE SUMMARY FROM HOURLY OBSERVATIONS

USAFETAC, ASHEVILLE NC				FROM HOU	URLY	OBSERVATIONS					
STATION	NUMBER:		TATION NAME: ST TO UTC: -	SPANDAHLEM AB/GERN	MANY		PERIO MONTH		ecord: jan 8	0 - DEC 89	
HOURS LST	MEAN	STANDARD DEVIATION	TOTAL OBS	••••••	MEAN	NUMBER LE 27	OF HOUR	S WITH LE 55	TEMPERATURES GE 65	DEG F TOTAL HOURS	
00-02	38.8	11.969	10567	•••••	••••	1922	6192	10043	3	10567	
03-05	38.2	11.883	10589			2014	6114	10172	4	10589	
06-08	38.5	12.204	10645			2021	6185	10133	3	10645	
09-11	39.9	12.359	10667			1836	6557	9844	15	10667	
12-14	40.3	11.887	10667			1620	6745	9851	32	10667	
15-17	40.2	11.874	10661			1647	6693	9866	36	10661	
18-20	39.8	12.110	10599			1748	6439	9836	25	10599	
21-23	39.4	12.072	10588	•		1851	6308	9939	8	10588	
ALL HOURS	39.4	12.069	84983			14659	51233	79684	126	84983	

······

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE OF RELATIVE HUMIDITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: JAN RELATIVE HUMIDITY GREATER THAN OR EQUAL TO HOURS 90% MEAN LST 10% 20% 30% 40% 50% 60% 70% 80% TOTAL OBS 00-02 100.0 100.0 100.0 100.0 917 99.6 98.0 87.9 55.6 19.0 80.6 03-05 100.0 100.0 100.0 100.0 99.7 97.9 89.1 58.4 19.9 81.2 921 06-08 100.0 100.0 100.0 100.0 99.7 97.5 89.5 59.2 20.2 81.3 924 09-11 100.0 100.0 100.0 100.0 99.5 97.6 86.3 56.2 17.6 80.4 924 12-14 100.0 100.0 99.9 99.8 98.4 80.2 48.2 78.1 923 94.1 14.7 99.7 77.1 15-17 100.0 100.0 99.9 98.3 93.8 76.4 46.2 12.6 924 100.0 100.0 99.9 99.0 18-20 100.0 96.3 83.0 48.5 16.0 78.8 917 21-23 100.0 100.0 100.0 100.0 99.5 97.8 86.2 52.9 20.3 80.2 918 ALL HOURS 100.0 100.0 100.0 99.9 99.2 96.6 53.2 17.5 79.7 7368 MONTH: FEB 00-02 100.0 100.0 100.0 99.2 95.8 85.7 71.4 39.1 15.0 75.2 03-05 100.0 100.0 100.0 99.5 97.4 88.6 72.6 38.2 16.4 75.9 849 100.0 100.0 98.1 06-08 100.0 99.8 91.8 74.6 38.9 16.1 76.4 849 09-11 100.0 100.0 99.9 99.4 94.7 86.5 68.6 35.9 13.7 74.3 849 12-14 100.0 100.0 99.4 95.1 88.0 72.8 50.3 28.0 10.5 68.7 849 15-17 100.0 100.0 98.0 93.6 82.9 65.7 43.5 27.6 9.3 66.4 849 100.0 18-20 100.0 98.8 97.4 89.3 77.5 54.1 33.3 11.9 70.6 849 21-23 100.0 100.0 99.4 98.2 93.9 36.5 13.4 73.4 849 84.3 64.2 ALL 100.0 100.0 99.4 97.8 92.5 34.7 13.3 72.6 6792 HOURS 81.6 62.4

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE OF RELATIVE HUMIDITY FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: JAN 80 - DEC 89 STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY LST TO UTC: - 1 MONTH: MAR HOURS RELATIVE HUMIDITY GREATER THAN OR EQUAL TO LST 10% 20% 30% 40% 50% 60% 70% 80% 90% MEAN TOTAL OBS 00-02 100.0 100.0 99.8 99.7 98.0 91.5 74.5 49.4 18.5 77.5 930 03-05 100.0 100.0 99.9 99.7 98.9 20.2 930 94.2 79.0 56.7 79.4 100.0 06-08 100.0 100.0 99.7 98.8 95.3 82.7 59.7 24.6 80.7 930 95.9 09-11 100.0 100.0 100.0 99.5 87.0 69.8 48.0 16.1 76.3 930 12-14 100.0 100.0 99.4 95.2 85.4 68.9 50.5 29.5 6.5 68.0 930 15-17 100.0 99.8 98.5 93.1 79.8 60.3 42.3 23.8 5.8 64.7 930 97.3 18-20 100.0 100.0 99.6 89.0 72.6 54.3 32.8 9.9 69.9 929 95.9 21-23 100.0 100.0 100.0 99.9 84.3 66.3 41.7 14.5 74.7 930 ALL 42.7 14.5 73.9 7439 HOURS 92.7 64.9 100.0 100.0 99.6 98.0 81.8 MONTH: APR 00-02 100.0 100.0 100.0 99.3 94.2 82.0 64.4 42.6 14.2 74.2 900 03-05 100.0 100.0 100.0 99.7 96.6 88.0 72.4 50.6 16.7 76.9 900 06-08 100.0 100.0 100.0 99.9 97.2 88.9 74.0 53.9 16.7 77.6 900 09-11 100.0 100.0 99.8 94.9 84.8 70.8 50.3 30.7 8.8 68.4 900 12-14 100.0 100.0 97.9 84.4 66.4 47.6 30.6 15.9 3.9 59.0 899 15-17 100.0 100.0 96.2 78.8 56.7 62.0 42.6 26.1 14.7 2.9 899 18-20 100.0 100.0 98.8 85.6 72.9 54.8 36.9 20.8 5.1 62.0 900 21-23 100.0 100.0 99.9 96.9 86.2 72.1 53.4 32.1 9.6 69.5 900 ALL HOURS 100.0 100.0 99.1 92.4 82.5 68.4 51.0 32.6 9.7 68.0 7198

E - 6 - 2

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE OF RELATIVE HUMIDITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: MAY HOURS RELATIVE HUMIDITY GREATER THAN OR EQUAL TO 90% MEAN TOTAL OBS LST 10% 20% 30% 40% 70% 80% 50% 60% 00-02 78.7 930 100.0 100.0 100.0 100.0 97.6 90.2 78.8 56.1 18.3 03-05 100.0 100.0 100.0 100.0 99.7 94.9 86.5 71.2 25.6 82.6 930 06-08 100.0 100.0 100.0 99.9 99.2 92.3 83.1 63.1 22.5 80.6 930 09-11 100.0 100.0 99.9 98.0 89.6 71.9 51.7 29.9 8.4 69.5 929 100.0 12-14 100.0 99.2 89.7 70.0 60.0 45.3 30.0 16.7 2.6 930 15-17 100.0 100.0 98.1 86.1 63.8 57.6 41.3 26.2 13.7 1.7 930 18-20 100.0 100.0 99.1 92.5 76.9 52.6 36.7 21.8 4.4 63.0 930 21-23 100.0 100.0 100.0 99.5 93.8 78.5 59.9 39.0 10.9 72.7 ALL HOURS 100.0 100.0 99.5 95.7 86.3 70.9 56.6 38.9 11.8 70.6 7439 MONTH: JUN 00-02 100.0 100.0 100.0 99.9 99.4 86.3 68.8 25.2 82.8 900 96.3 03-05 100.0 100.0 100.0 100.0 99.8 99.2 93.1 78.2 34.9 85.7 900 06-08 100.0 100.0 100.0 100.0 99.8 97.3 90.6 66.6 27.2 83.2 900 09-11 100.0 100.0 100.0 99.0 27.7 7.9 70.7 900 94.0 78.1 53.1 100.0 99.8 12-14 28.6 100.0 93.1 78.6 52.8 13.8 3.6 61.6 900 100.0 100.0 98.4 73.6 60.5 15-17 91.1 46.7 28.7 14.0 3.6 900 100.0 100.0 99.7 95.6 85.1 63.2 42.3 21.4 6.0 66.1 18-20 900 21-23 100.0 100.0 100.0 99.3 95.8 88.6 72.9 46.4 14.7 76.6 900 ALL HOURS 100.0 100.0 99.7 97.3 90.8 77.8 61.9 42.1 15.4 73.4 7200

E - 6 - 3

HOURS

100.0 100.0

99.9

97.2

88.7

74.9

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE OF RELATIVE HUMIDITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: JUL HOURS RELATIVE HUMIDITY GREATER THAN OR EQUAL TO LST 70% 10% 20% 30% 40% 50% 60% 80% 90% MEAN TOTAL OBS 82.0 840 00-02 100.0 100.0 100.0 100.0 99.4 97.3 85.7 63.8 20.8 03-05 100.0 100.0 100.0 100.0 100.0 99.5 94.6 78.1 85.7 840 31.1 06-08 100.0 100.0 100.0 100.0 100.0 98.1 87.6 67.2 24.6 83.0 858 09-11 100.0 100.0 100.0 99.2 92.3 71.8 45.5 24.8 9.2 69.1 858 100.0 100.0 59.4 12-14 99.1 92.1 71.8 41.6 23.8 14.0 4.4 858 15-17 100.0 100.0 98.7 88.2 60.4 39.1 21.9 11.8 4.1 57.0 857 18-20 100.0 100.0 99.5 95.3 78.9 53.6 32.9 16.0 5.3 63.0 856 21-23 100.0 100.0 100.0 99.9 97.8 85.6 62.1 35.9 10.6 849 ALL HOURS 87.5 13.7 71.6 100.0 100.0 99.7 73.2 56.6 38.8 6816 96.8 MONTH: AUG 00-02 100.0 100.0 100.0 100.0 99.8 97.7 87.6 61.5 20.9 82.2 837 03-05 100.0 100.0 100.0 100.0 100.0 95.6 79.3 28.1 85.7 837 06-08 100.0 100.0 100.0 100.0 100.0 98.9 94.1 73.0 23.7 84.4 837 09-11 100.0 100.0 100.0 99.9 94.7 77.3 51.9 28.0 7.6 70.9 837 100.0 100.0 12-14 72.5 20.3 8.5 2.8 58.7 99.9 93.4 41.7 836 15-17 100.0 100.0 99.6 88.4 63.8 37.4 19.4 8.4 1.9 56.6 837 18-20 100.0 100.0 100.0 95.6 80.2 58.5 33.3 16.8 3.9 63.8 837 21-23 100.0 100.0 100.0 100.0 98.3 87.6 66.1 38.5 10.2 75.1 837 ALL

58.5

39.3

12.4

72.2

6695

03-05

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE OF RELATIVE HUMIDITY FROM HOURLY OBSERVATIONS

100.0 100.0 100.0 100.0 100.0 99.8 98.0 79.6 27.0 85.3 815

00-02 | 100.0 100.0 100.0 99.9 99.8 98.9 93.7 71.4 18.6 83.0 810

	ļ .										
06-08	100.0	100.0	100.0	100.0	100.0	100.0	98.1	79.3	25.8	85.4	823
09-11	100.0	100.0	100.0	100.0	98.7	89.9	69.9	39.9	9.7	75.8	824
12-14	100.0	100.0	99.5	96.6	82.3	58.8	33.6	15.4	2.7	63.7	825
15-17	100.0	100.0	99.5	93.9	75.2	48.6	28.1	15.6	3.2	61.1	821
18-20	100.0	100.0	100.0	98.3	92.8	77.3	52.3	27.5	5.3	70.1	810
21-23	100.0	100.0	100.0	99.8	99.4	95.1	82.1	51.9	10.7	78.8	810
ALL HOURS	100.0	100.0	99.9	98.5	93.5	83.5	69.4	47.5	12.9	75.4	6538
								м	ONTH: OC	T	
00-02	100.0	100.0	100.0	100.0	99.6	98.6	95.5	72.5	16.7	82.9	905
03-05	100.0	100.0	100.0	100.0	99.5	99.2	96.7	76.4	24.2	84.1	910
06-08	100.0	100.0	100.0	100.0	100.0	99.6	97.1	75.5	26.5	84.3	926
09-11	100.0	100.0	100.0	99.8	99.1	96.7	88.5	61.3	16.0	80.5	930
12-14	100.0	100.0	99.7	99.4	95.4	82.0	60.6	34.0	4.3	72.0	930
15-17	100.0	100.0	99.7	99.0	94.5	80.1	54.5	29.7	5.6	70.7	930
18-20	100.0	100.0	100.0	99.6	98.6	95.2	79.9	48.5	8.0	77.4	930
21-23	100.0	100.0	100.0	99.9	99.1	98.7	92.1	65.2	12.1	81.2	928
ALL HOURS	100.0	100.0	99.9	99.7	98.2	93.7	83.0	57.8	14.1	79.1	7389

100.0 100.0

HOURS

100.0

99.6

98.9

95.9

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE OF RELATIVE HUMIDITY FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89 LST TO UTC: - 1 MONTH: NOV HOURS RELATIVE HUMIDITY GREATER THAN OR EQUAL TO 30% 90% LST 10% 20% 40% 50% 60% 70% 80% MEAN TOTAL OBS 100.0 100.0 100.0 100.0 99.8 00-02 98.3 90.4 69.0 27.4 83.1 869 03-05 100.0 100.0 100.0 100.0 91.0 69.7 29.5 83.7 871 99.9 99.0 06-08 100.0 100.0 100.0 100.0 100.0 98.4 92.7 71.1 32.8 84.3 876 09-11 100.0 100.0 100.0 99.8 99.5 97.6 89.8 66.9 27.2 82.7 885 12-14 100.0 100.0 99.7 99.1 97.7 89.9 76.2 53.2 17.6 77.8 884 100.0 100.0 99.8 99.3 97.9 75.0 49.2 15-17 88.7 15.5 76.9 884 100.0 100.0 100.0 99.8 19.5 18-20 99.4 96.3 84.6 61.9 80.6 871 21-23 100.0 100.0 100.0 100.0 99.8 97.3 88.6 66.1 24.1 82.2 867 ALL HOURS 99.9 7007 100.0 100.0 99.7 99.2 95.7 86.0 63.4 24.2 81.4 MONTH: DEC 00-02 100.0 100.0 100.0 99.9 99.1 96.5 90.0 65.9 26.4 82.5 880 03-05 100.0 100.0 100.0 99.7 99.5 66.4 82.9 886 96.0 90.5 26.3 06-08 100.0 100.0 100.0 99.7 99.4 96.9 90.8 67.8 26.9 82.9 892 09-11 100.0 100.0 100.0 99.8 99.1 96.9 90.3 67.3 26.0 82.5 901 12-14 100.0 100.0 100.0 99.2 97.9 94.4 83.2 59.1 21.8 80.0 903 15-17 100.0 100.0 100.0 99.1 97.9 93.7 81.6 58.3 19.6 79.6 900 18-20 100.0 100.0 100.0 99.9 99.0 95.9 86.9 63.2 22.9 81.3 870 21-23 100.0 100.0 100.0 65.9 25.1 82.3 100.0 99.0 97.0 89.3 ALL

87.8

64.2

24.3

81.8

7102 .

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE OF RELATIVE HUMIDITY FROM HOURLY OBSERVATIONS

FTATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: ALL

HOURS			RELAT	IVE HUMI	DITY GRE	ATER THA	N OR EQU	AL TO			
LST	10%	20%	30%	40%	50%	60%	70%	80%	90%	MEAN	TOTAL OBS
00-02	100.0	100.0	100.0	99.8	98.5	94.2	83.7	59.5	20.1	80.4	10567
03-05	100.0	100.0	100.0	99.9	99.2	96.3	88.2	66.8	24.9	82.4	10589
06-08	100.0	100.0	100.0	99.9	99.4	96.2	87.8	64.5	24.0	82.0	10645
09-11	100.0	100.0	100.0	99.1	95.2	85.2	68.2	43.3	14.1	75.2	10667
12-14	100.0	100.0	99.4	94.8	83.8	66.1	47.7	28.3	8.0	67.3	10667
15-17	100.0	100.0	98.9	92.6	79.4	61.8	44.0	26.3	7.2	65.5	10661
18-20	100.0	100.0	99.6	96.4	88.4	74.5	56.6	34.5	9.9	70.6	10599
21-23	100.0	100.0	99.9	99.4	96.5	88.9	73.6	47.7	14.7	76.7	10588
ALL HOURS	100.0	100.0	99.7	97.7	92.5	82.9	68.7	46.3	15.3	75.0	84983

PPPPP	PPP	AAA	AAA	RRRR	RRRR	Telefelefelelete	PFFFFFFFF
PPPPP	PPPP	AAAA	AAAA	RRRR	RRRRR	TTTTTTTTTTT	PFFFFFFFF
PP	PP	AA	AA	RR	RR	TT	pp
PP	PP	AA	AA	RR	RR	TT	FF
PPPPP	PPPP	AA	AA	RRRR	RRRRR	TT	PFFFFF
PPPPP	PPP	AAAAA	AAAAA	RRRR	RRRR	TT	FFFFFF
PP		AAAAA	AAAAA	RR	RR	TT	PF
PP		AA	AA	RR	RR	TT	FF
PP		AA	AA	RR	RR	TT	FF
PP		AA	AA	RR	RR	TT	FF

PART F

PRESSURE SUMMARIES

ALL PRESSURE DATA IN PART F IS TAKEN FROM HOURLY OBSERVATIONS. IT IS SUMMARIZED:

- BY EIGHT 3-HOUR STANDARD SYNOPTIC REPORTING TIME PERIODS FOR EACH MONTH (ALL YEARS COMBINED).
- BY MONTH (ALL YEARS AND ALL HOURS COMBINED).
- BY YEAR (ALL YEARS AND ALL HOURS COMBINED).

SEA LEVEL PRESSURE.

IN MILLIBARS, TABLES GIVE MEANS, STANDARD DEVIATIONS, AND TOTAL OBSERVATION COUNTS. THIS SUMMARY IS NOT AVAILABLE FOR METAR REPORTING SITES.

ALTIMETER SETTING.

IN INCHES OF MERCURY (HG), TABLES GIVE MEANS, STANDARD DEVIATIONS, AND TOTAL OBSERVATION COUNTS.

STATION PRESSURE.

IN INCHES OF MERCURY (HG), TABLES GIVE MEANS, STANDARD DEVIATIONS AND TOTAL OBSERVATION COUNTS.

PRESSURE CONVERSIONS ARE: 1 MILLIBAR = 0.02953 INCHES OF MERCURY (Hg).

ALTIMETER SETTING IN INCHES FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1

			101 10	oic	•									
Hours (LST)	STATS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	oct	VOM	DEC	ANN
0100	MEAN	30.03	30.05	29.93	29.96	29.96	30.03	30.06	30.04	30.10	30.04	30.05	30.01	30.02
	SD	.352	.347	.290	.231	.210	.165	.158	.143	.188	.285	.283	.395	.271
	TOT OBS	306	283	310	300	310	300	280	279	270	301	290	294	3523
0400	MEAN	30.02	30.03	29.92	29.95	29.95	30.01	30.05	30.03	30.09	30.03	30.04	30.00	30 -
	SD	.352	.347	.291	.232	.213	.166	.160	.145	.194	.286	.282	.395	.2
	TOT OBS	307	283	310	300	310	300	280	279	272	302	290	296	3529
0700	MEAN	30.01	30.03	29.92	29.96	29.96	30.03	30.06	30.04	30.09	30.03	30.04	30.00	30.01
	SD	.356	.348	.294	.235	.216	.167	.162	.148	.197	.292	.283	.393	.274
	TOT OBS	308	283	310	300	310	300	286	279	275	310	291	296	3548
1000	MEAN	30.03	30.05	29.94	29.97	29.96	30.04	30.07	30.05	30.11	30.05	30.05	30.03	30.03
	SD	.360	.350	.299	.236	.218	.166	.162	.148	.199	.293	.287	.395	.276
	TOT OBS	308	283	310	300	310	300	286	279	275	310	295	301	3557
1300	MEAN	30.02	30.05	29.93	29.96	29.96	30.03	30.06	30.04	30.10	30.04	30.04	30.01	30.02
	SD	.365	.346	.295	.232	.214	.162	.159	.145	.195	.290	.285	.395	.275
	TOT OBS	308	283	310	300	310	300	286	279	275	310	295	301	3557
1600	MEAN	30.01	30.03	29.91	29.94	29.94	30.01	30.05	30.03	30.09	30.03	30.03	30.C1	30.01
	SD	.366	.340	.289	.227	.209	.159	.160	.138	.191	.286	.286	.392	.272
	TOT OBS	308	283	310	300	310	300	286	279	274	310	295	302	3557
1900	MEAN	30.02	30.04	29.92	29.95	29.94	30.01	30.04	30.03	30.09	30.04	30.05	30.01	30.01
	SD	.363	.338	.290	.226	.204	.158	.157	.135	.190	.284	.284	.392	.270
	TOT OBS	306	283	309	300	310	300	285	279	270	310	289	290	3531
2200	MEAN	30.03	30.05	29.94	29.97	29.96	30.03	30.06	30.05	30.11	30.04	30.05	30.01	30.02
	SD	.360	.338	.289	.228	.206	.161	.156	.138	.190	.287	.287	.392	.270
	TOT OBS	306	283	310	300	310	300	285	279	270	310	289	290	3532
ALL	mean	30.02	30.04	29.93	29.96	29.95	30.02	30.06	30.04	30.10	30.04	30.04	30.01	30.02
HOURS	SD	.359	.344	.292	.231	.211	.164	.160	.143	.193	.288	.285	.394	.273
	TOT OBS	2457	2264	2479	2400	2480	2400	2274	2232	2181	2463	2334	2370	28334

STATION PRESSURE IN INCHES FROM HOURLY OBSERVATIONS

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY

PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1

			LST TO	orc: -	1									
Hours (LST)	STATS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
•••••			••••••	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • •	• • • • • • • • •	••••••	• • • • • • • • • • • • • • • • • • • •	••••••	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • •
0100	MEAN	28,75	28.76	28.66	28.68	28.68	28.75	28.78	28.76	28.82	28.76	28.77	28.73	28.74
	SD SD	.340	.335	.280	.223	.202	.160	.152	.138	.182	.275	.273	.381	.262
	TOT OBS	305	283	310	300	310	300	280	279	270	301	291	294	3523
0400	MEAN	28.74	28.75	28.64	28.67	28.67	28.73	28.76	28.75	28.81	28.75	28.75	28.72	28.73
	SD	.339	.335	.281	.224	.205	.160	.158	.140	.183	.276	.272	.382	.263
	TOT OBS	307	283	310	300	310	300	282	279	270	302	290	296	3529
0700	MEAN	28.73	28.75	28.64	28.68	28.68	28.74	28.78	28.76	28.81	28.75	28.76	28.72	28.73
	SD	.343	.336	.284	.228	.209	.161	.156	.143	.190	.282	.274	.380	.265
	TOT OBS	308	283	310	300	310	300	286	279	275	310	291	296	3548
1000	MEAN	28.75	28.77	28.66	28.69	28.69	28.75	28.79	28.77	28,83	28.77	28.77	28.75	28.75
	SD	.348	.337	.288	.228	.211	.160	.156	.143	.192	.283	.277	.381	.267
	TOT OBS	308	283	310	300	310	300	286	279	275	310	295	301	3557
1300	MEAN	28.74	28.77	28.66	28.68	28.68	28.75	28.78	28.76	28.82	28.76	28.76	28.73	28.74
	SD	.352	.334	.284	.224	.207	.157	.154	.140	.188	.280	.276	.382	.265
	TOT OBS	308	283	310	300	310	300	286	279	275	310	295	301	3557
1600	MEAN	28.73	28.75	28.64	28.67	28.66	28.73	28.77	28.75	28.80	28.74	28.74	28.73	28.72
	SD	.353	.328	.279	.219	.201	.154	.154	.133	.185	.276	.278	.379	.263
	TOT OBS	308	283	310	300	310	300	286	279	274	310	295	302	3557
1900	MEAN	28.74	28.76	28.65	28.67	28.66	28.73	28.76	28.75	28.81	28.76	28.76	28.73	28.73
	SD	.351	.327	.280	.218	.197	.153	.152	.130	.183	.274	.274	.379	.261
	TOT OBS	306	283	309	300	310	300	285	279	270	310	289	290	3531
2200	MEAN	28.75	28.77	28.66	28.69	28.69	28.75	28.78	28.77	28.83	28.76	28.77	28.73	28.74
	SD	.347	.326	.278	.221	.198	.156	.151	.133	.183	.277	.277	.379	.261
	TOT OBS	306	283	310	300	310	300	285	279	270	310	289	290	3532
ALL	MEAN	28.74	28.76	28.65	28.68	28.68	28.74	28.77	28.76	28.82	28.76	28.76	28.73	28.74
HOURS	SD	.347	.332	.282	.223	.204	.158	.154	.138	.186	.278	.275	.380	.263
	TOT OBS	2456	2264	2479	2400	2480	2400	2276	2232	2179	2463	2335	2370	28334

PPPPP	PPP	AAA	AAA	RRRR	RRRR	THEFTER	G	GGGG
PPPPP	PPPP	AAAA	AAAA	RRRR	RRRRR	Tale Lal. Lal. Lal. Lal.	GG	GGGGG
PP	PP	AA	AA	RR	RR	TT	GG	GG
PP	PP	AA	AA	RR	RR	TT	GG	
PPPPP	PPPP	AA	AA	RRRR	RRRRR	TT	GG	
PPPPP	PPP	AAAAA	AAAAA	RRRR	RRRR	TT	GG	GGGG
PP		AAAAA	AAAAA	RR	RR	TT	GG	GGGGG
PP		AA	AA	RR	RR	TT	GG	GG
PP		AA	AA	RR	RR	TT	GG	GGGGG
PP		AA	AA	RR	RR	Jer	G	agggg

PART G

CROSSWIND SUMMARY

CROSSWIND SUMMARIES.

THESE TABLES ARE CREATED FROM HOURLY AND SPECIAL OBSERVATIONS (INCLUDING PEAK GUST REMARKS). THE TABLES ARE SUMMARIZED AS FOLLOWS:

- BY EIGHT 3-HOUR STANDARD TIME PERIODS FOR EACH MONTH (ALL YEARS COMBINED).
- BY MONTH (ALL YEARS AND ALL HOURS COMBINED).
- BY MONTH (ALL YEARS AND THE HOURS 0600-2000 LST COMBINED).
- BY YEAR (ALL YEARS AND ALL HOURS COMBINED).
- BY YEAR (ALL YEARS AND THE HOURS 0600-2000 LST COMBINED).

THE TABLES GIVE PERCENT OCCURRENCE FREQUENCY (POF) OF THE "CROSS-RUNWAY WIND COMPONENT" FOR THE WIND SPEED CLASSES SPECIFIED IN THE TABLE HEADINGS. THERE ARE TWO COMPONENT CATEGORIES:

THE FIRST COMPONENT IS COMPUTED FROM THE REPORTED WIND DIRECTION AND WIND SPEED FROM HOURLY RECORD OR RECORD-SPECIAL OBSERVATIONS.

THE SECOND COMPONENT IS COMPUTED FROM THE HIGHEST REPORTED WIND SPEED AND DIRECTION FROM ALL OBSERVATIONS INCLUDING REMARKS, GUSTS, AND SPECIAL OBSERVATIONS.

OBSERVATION COUNTS INCLUDE CALM WINDS.

VARIABLE WINDS ARE CONSIDERED A DIRECT CROSSWIND IF THE SPRED EQUALS OR EXCREDS THE SPECIFIED THRESHOLD WIND SPEED VALUE(S).

A TOTAL OBSERVATION COUNT IS INCLUDED.

OPERATING LOCATION "A" PERCENTAGE FREQUENCY OF OCCURRENCE OF CROSSWINDS USAFETAC, ASHEVILLE NC

MAGNETIC RUNWAY HEADING: 046-226

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 MONTH: JAN

CATEGORY A: ANY CEILING OR VISIBILITY (HOURLY OBS ONLY)

CATEGORY B: HIGHEST WINDS REPORTED WITHIN THE HOUR (HOURLIES + SPECIALS)

TIME (LST)		000	0 - 02	00		030	0 - 05	00		060	0 - 08	00		090	0 - 11	00
SPEED (KTS)	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS
CATEGORY A	1.6			917	2.0	.1		921	1.2			924	1.8	.1		924
CATEGORY B	5.0	2.1		1009	5.5	1.2	.1	1079	3.9	1.0		1083	4.8	1.8	.1	1119
••••••	• • • • • •	•••••	••••	•••••			•••••	•••••	• • • • • • • • • •	•••••	• • • • •			•••••	•••••	••••
TIME (LST)		120	0 - 14	00		150	0 - 17	00		180	0 - 20	00		210	0 - 23	00
SPEED (KTS)	GE10	GB15	GE25	OBS	GE10	GE15	GE25	OBS	GE10	GB15	GE25	OBS	GE10	GE15	GE25	OBS
CATEGORY A	2.7	.2		924	2.7			924	3.5	.8	.1	918	3.2	.9		918
															_	1020
CATEGORY B	5.8	2.2		1113	5.4	2.1		1069	6.0	3.2	. 6	1029	5.4	2.7	.2	1039
CATEGORY B	5.8	2.2	••••	1113	5.4	2.1		1069	6.0	3.2		1029	5.4	2.7		
CATEGORY B	5.8	2.2	•••••	1113	5.4	2.1	•••••	1069	6.0	3.2		1029	5.4			

TIME (LST) 0600 - 2000 ALL HOURS GE10 GE15 GE25 OBS GE10 GE15 GE25 SPEED KTS OBS 2.4 .2 .0 4614 CATEGORY A 2.3 .3 .0 7370 5.2 2.0 .1 8540 CATEGORY B 5.2 2.1 .2 5413

OPERATING LOCATION "A" PERCENTAGE FREQUENCY OF OCCURRENCE OF CROSSWINDS USAFETAC, ASHEVILLE NC

MAGNETIC RUNWAY HEADING: 046-226

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CATEGORY B

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY

PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 MONTH: FEB

CATEGORY A: ANY CEILING OR VISIBILITY (HOURLY OBS ONLY)

CATEGORY B: HIGHEST WINDS REPORTED WITHIN THE HOUR (HOURLIES + SPECIALS)

• • • • • • • • • • • • • • • • • • • •	• • • • • • •	• • • • • •	• • • • • •	• • • • • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • •	• • • • • • • • •	• • • • •	••••	• • • • • •	• • • • • • • • • •	• • • • • •	• • • • •	••••
TIME (LST)	}	000	0 - 02	00		030	0 - 050	0		06	500 -	0800		090	00 - 11	00
SPEED (KTS)	GE10	GE15	GE25	OBS	GE10	GE15	GR25	OBS	GE10	GE15	GE2	5 OBS	GE10	GE15	GB25	OBS
CATEGORY A	1.3 .1 849 3.4 .8 924				1.4			849	1.1			849	2.5			849
CATEGORY B				924	4.6	.5		955	3.7	.4	ı	1004	6.3	1.5		1016
•••••	 	•••••	• • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • •		• • • • • •			• • • •	• • • • •	• • • • • •		• • • • • •	• • • • • •	••••
TIME (LST)		120	0 - 14	00		150	0 - 170	0		18	300 -	2000		210	0 - 23	00
SPEED (KTS)	1200 - 1400 GE10 GR15 GE25 OBS 5.5 .4 849				GE10	GE15	GE25	OBS	GE10	GE1	GE2	5 OBS	GE10	GE15	GE25	OBS
CATEGORY A	5.5	.4		849	4.1	.4		849	2.1			849	1.3			849
CATEGORY B	11.5	3.5	.1	977	9.9	2.3		997	5.2	1.2	?	932	4.1	.9		929
	 • • • • • • • •	•••••			• • • • • •	•••••	• • • • • • •	••••		• • • • •		• • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • •	••••	••••
		•••••	•••••	• • • • • • • • •	• • • • • •	•••••	•••••	••••	• • • • • • • • •	••••	• • • • •	• • • • • • •		• • • • • •	• • • • • •	••••
TIME (LST)					0600	- 2000	1				ALL	HOURS				
SPEED KTS				GE10	GE15	GE25	OBS		G	E10	GE15	GE25	OBS			
CATEGORY A				3.1	.1		4245			2.4	.1		6792			
	}															

G - 2 - 2

7.3 1.8 .0 4926 6.1 1.4 .0 7734

OPERATING LOCATION "A"
USAFFTAC, ASHEVILLE NC OPERATING LOCATION "A"

PERCENTAGE FREQUENCY OF OCCURRENCE OF CROSSWINDS FROM HOURLY OBSERVATIONS

MAGNETIC RUNWAY HEADING: 046-226 PERIOD OF RECORD: JAN 80 - DEC 89

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY LST TO UTC: - 1

MONTH: MAR

CATEGORY A: ANY CEILING OR VISIBILITY (HOURLY OBS ONLY)

CATEGORY B: HIGHEST WINDS REPORTED WITHIN THE HOUR (HOURLIES + SPECIALS)

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TIME (LST)		000	0 - 02	00		030	0 - 05	00		060	0 - 0	воо		090	0 - 11	.00
SPEED (KTS)	GE10	GE15	GB25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GE25	овѕ	GE10	GE15	GR25	OBS
CATEGORY A	.8			930	.6	.1		930	.6	.2		930	2.2	.4		930
CATEGORY B	2.5	1.0		1017	2.9	1.0	.2	1047	2.6	.8	.1	1067	5.6	1.1	.1	1080
	i • • • • • • •		•••••	•••••		•••••		• • • • • •	• • • • • • • • •	• • • • • •	•••••					
TIME (LST)		120	0 - 14	00		150	0 - 17	00		180	00 - 2	000		210	0 - 23	00
SPEED (KTS)	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GB25	OBS
CATEGORY A	3.3	.5		930	4.0	.2		930	1.5	.1		929	1.5	.2		930
CATEGORY B	11.4	3.0	.6	1077	10.0	3.6	.2	1084	3.8	1.2	.2	1017	3.7	1.6	.1	1016
	• • • • • • •														•••••	
•••••••		•••••	•••••	•••••	• • • • • •		•••••	• • • • • •	• • • • • • • • •	• • • • • •	• • • • •		••••••	• • • • • •	•••••	•••••
TIME (LST)					0600	- 2000	•			1	LL	HOURS				
SPEED KTS				GE10	GE15	GE25	OB	8	d	3E10 0	SE15	GE25	OBS			
CATEGORY A				2.3	.3		464	9		1.8	.2		7439			
CATEGORY B				6.7	2.0	.2	532	5		5.4	1.7	.2	8405			

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OPERATING LOCATION "A" PERCENTAGE FREQUENCY OF OCCURRENCE OF CROSSWINDS USAFETAC, ASHEVILLE NC FROM HOURLY ORSEDUATIONS

MAGNETIC RUNWAY HEADING: 046-226

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 MONTH: APR

CATEGORY A: ANY CEILING OR VISIBILITY (HOURLY OBS ONLY)

CATEGORY B: HIGHEST WINDS REPORTED WITHIN THE HOUR (HOURLIES + SPECIALS)

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TIME (LST)		000	0 - 020	00		030	0 - 05	00		060	00 - 0	800		090	0 - 110	00
SPEED (KTS)	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE10	GB15	GE25	OBS
CATEGORY A	.7	.3		900	.3	.2		900	.4			900	1.9			900
CATEGORY B	1.3	.3		958	.8	.3		986	1.5	.1		1020	5.7	.8		981
•••••	· • • • • • • • • • • • • • • • • • • •		• • • • • •	• • • • • • • • • •			•••••		• • • • • • •			•••••		• • • • • •		
TIME (LST)		120	0 - 14	00		150	0 - 17	00		180	00 - 2	000		210	0 - 23	00
SPEED (KTS)	1200 - 1400 GE10 GE15 GE25 OBS				GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS
CATEGORY A	4.2			900	4.1	.2		900	1.2			900	.2			900
CATEGORY B	9.3	1.4	.1	982	8.8	1.9		961	3.0	1.2		953	1.0	.3		942
!	• • • • • • •	• • • • • •	• • • • • •	• • • • • • • • • •		•••••			• • • • • • • •			•••••	• • • • • • • • •			
*************	• • • • • • •	• • • • • •	• • • • • •	• • • • • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • • •	• • • • • • • •		• • • • •	• • • • • • •	• • • • • • • • • •	• • • • • •	•••••	• • • • •
TIME (LST)	<u> </u>				0600	- 2000)			,	LL :	HOURS				
SPEED KTS				GE10	GE15	GE25	ОВ	s	(3E10 G	B 15	GR25	OBS			

CATEGORY A 2.4 .0 4500 1.6 .1 7200 5.6 1.1 .0 4897 3.9 .8 .0 7783 CATEGORY B

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USAFETAC, ASHEVILLE NC OPERATING LOCATION "A"

PERCENTAGE FREQUENCY OF OCCURRENCE OF CROSSWINDS FROM HOURLY OBSERVATIONS

MAGNETIC RUNWAY HEADING: 046-226

PERIOD OF RECORD: JAN 80 - DEC 89

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY

LST TO UTC: - 1 MONTH: MAY

CATEGORY A: ANY CEILING OR VISIBILITY (HOURLY OBS ONLY)

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TIME (LST)		000	0 - 02	00		030	0 - 050	00		060	0 - 0	00800		090	0 - 11	00
SPEED (KTS)	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GE2	OBS	GE10	GE15	GE25	OBS
CATEGORY A				930				930	.3			930	1.1			930
CATEGORY B	.2	.2 993			.3			1016	1.3	.1		1055	5.6	.8		1020
•••••	• • • • • • •					•••••	•••••	• • • • • •		•••••	••••		•••••	• • • • •		••••
TIME (LST)		120	0 - 14	00		150	0 - 170	00		180	0 - 2	2000		210	0 - 23	00
SPEED (KTS)	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GE2	obs	GE10	GE15	GE25	OBS
CATEGORY A	2.7			930	2.0			930	.6			930	.2			930
CATEGORY B	7.2	1.7		1012	6.9	1.1	.1	998	2.6	.3		987	.7	.1		959
•••••		•••••	•••••			•••••		• • • • • •		•••••				• • • • •		
TIME (LST)		•••••		*******	0600	- 2000		•••••	• • • • • • • • • • • • • • • • • • • •		ALL	HOURS				••••
SPEED KTS				GE10			ОВ	•			E15	GE25	OBS			
					GEIS	GEZO					ELJ	GEZJ				
CATEGORY A				1.4			4650			.9	_		7440			
CATEGORY B				4.7	.8	.0	5073	2		3.1	.5	.0	8040			

OPERATING LOCATION "A" PERCENTAGE FREQUENCY OF OCCURRENCE OF CROSSWINDS USAFETAC, ASHEVILLE NC FROM ROUDILY OPERATION

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MAGNETIC RUNWAY HEADING: 046-226

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY

LST TO UTC: - 1

PERIOD OF RECORD: JAN 80 - DEC 89

MONTH: JUN

CATEGORY A: ANY CEILING OR VISIBILITY (HOURLY OBS ONLY)

TIME (LST)		000	0 - 02	00		030	0 - 050	00		060	00 - 0	800		090	00 - 11	00
SPEED (KTS)	GE10	GR15	GE25	OBS	GE10	GE15	GE25	OBS	GR10	GE15	GE25	OBS	GE10	GE15	GE25	овѕ
CATEGORY A				900	.1			900	.6			900	1.4			900
CATEGORY B	.2	.1		958	.1			1022	1.1	.1		1034	3.0	.1		993
••••••	· • • • • • • •	•••••	• • • • • •			•••••	• • • • • •	• • • • •		• • • • •				· · · · · · ·		• • • • •
TIME (LST)		120	0 - 14	00		150	0 - 170	00		180	00 - 2	2000		210	00 - 23	00
SPEED (KTS)	GB10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS
CATEGORY A	1.9			900	1.6			900				900				900
CATEGORY B	4.7	.2		1004	4.9	.4		975	1.6	.4		955	.2			950
	! • • • • • • • •	•••••	• • • • • •	• • • • • • • • •	• • • • • •	•••••	•••••			• • • • • •				•••••		••••
••••••		•••••	• • • • • •	• • • • • • • • • •		• • • • • •	•••••	• • • • • •		• • • • • •		• • • • • • •	• • • • • • • • • •	•••••	• • • • • •	• • • • •
TIME (LST)					0600	- 2000)			1	ALL	HOURS				
SPEED KTS				GE10	GE15	GE25	ОВ	3	G	E10 (E15	GE25	OBS			
CATEGORY A				1.1			4500)		.7			7200			
CATEGORY B				3.0	.2		4961	L		2.0	.2		7891			

PERCENTAGE FREQUENCY OF OCCURRENCE OF CROSSWINDS FROM HOURLY OBSERVATIONS

MAGNETIC RUNWAY HEADING: 046-226

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89
LST TO UTC: - 1 MONTH: JUL

CATEGORY A: ANY CEILING OR VISIBILITY (HOURLY OBS ONLY)

CATEGORY B: HIGHEST WINDS REPORTED WITHIN THE HOUR (HOURLIES + SPECIALS)

TIME (LST)		000	0 - 020)0		030	0 - 05	00		060	0 - 08	00		090	00 - 110	00
SPEED (KTS)	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GE25	овѕ
CATEGORY A				840				840	.1			858	.8			858
CATEGORY B	.2			904				941	.3	.1		996	2.4	.3		959
	i •••••••		•••••		• • • • • • • • • • • • • • • • • • • •			• • • • • •	• • • • • • • • • • • • • • • • • • • •					•••••		
TIME (LST)	ļ	120	0 - 140	70		150	0 - 17	00		180	0 - 20	00		210	0 - 230	00
TIME (LST) SPEED (KTS)	GE10	120 GE15	00 - 140 GE25	OBS	GE10	150 GE15	00 - 17 GE25	OO OBS	GE10	180 GE15	0 - 20 GE25	OBS	GE10	210 GE15	00 - 230 GE25	OBS
	GE10	_	_		GE10				GE10 .7				GE10			
SPEED (KTS)		GE15	_	OBS				OBS				OBS				OBS
SPEED (KTS)	2.1	GE15	_	OBS 858	1.4	GE15	GE25	OBS 858	.7	GE15	GE25	OBS 856	.1	GE15		OBS 849

TIME (LST) 0600 - 2000 ALL HOURS GE10 GE15 GE25 OBS SPEED KTS GE10 GE15 GE25 OBS CATEGORY A 1.0 .0 4288 .7 .0 6817 CATEGORY B 2.9 .5 .0 4736 2.0 .4 .0 7497

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USAFETAC, ASHEVILLE NC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CROSSWINDS FROM HOURLY OBSERVATIONS

MAGNETIC RUNWAY HEADING: 046-226

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 - DEC 89

LST TO UTC: - 1 MONTH: AUG

CATEGORY A: ANY CEILING OR VISIBILITY (HOURLY OBS ONLY)

CATEGORY B: HIGHEST WINDS REPORTED WITHIN THE HOUR (HOURLIES + SPECIALS)

TIME (LST)		000	0 - 020	00		030	0 - 050	0		06	00 -	0800		090	0 - 110	00
SPEED (KTS)	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GE2	5 OBS	GE10	GE15	GE25	OBS
CATEGORY A	.2			837				837				837	.5			837
CATEGORY B	.3			888				956	.8			963	2.9	.2		924
	• • • • • • •		•••••	• • • • • • • • •	•••••	• • • • • •		••••	••••••			• • • • • • •	• • • • • • • • • • • • • • • • • • • •		• • • • • •	• • • • •
TIME (LST)		120	0 - 140	00		150	0 - 170	0		18	00 -	2000		210	0 - 230	00
SPEED (KTS)	GE10	GE15	GE25	OBS	GE10	GE15	GE25	овѕ	GE10	GE15	GE2	5 OBS	GE10	GE15	GE25	OBS
CATEGORY A	1.9			837	2.6			837	.7			837				837
CATEGORY B	6.8	1.2		925	6.4	1.6	.1	893	2.1	.2		906	.2			881
	• • • • • • •			• • • • • • • • • •		• • • • • •			• • • • • • • • •			• • • • • • •	• • • • • • • • • • • • • • • • • • • •		• • • • • •	• • • • •
************	•••••	•••••	• • • • • •	••••••	• • • • • •	• • • • • •	• • • • • •	••••	* * * * * * * * * *		• • • • •	• • • • • • •	• • • • • • • • • • • • • • • • • • • •		• • • • • •	• • • • •
TIME (LST)					0600	- 2000					ALL	HOURS				
SPEED KTS				GE10	GE15	GE25	OBS		ď	3E10	GE15	GE25	OBS			
CATEGORY A				1.1			4185			.7			6696			
CATEGORY B				3.8	.6	.0	4611			2.4	.4	.0	7336			

G - 2 - 8

PERCENTAGE FREQUENCY OF OCCURRENCE OF CROSSWINDS

FROM HOURLY OBSERVATIONS

MAGNETIC RUNWAY HEADING: 046-226

STATION	NUMBER:	106070

STATION NAME: SPANDAHLEM AB/GERMANY LST TO UTC: - 1

PERIOD OF RECORD: JAN 80 - DEC 89

MONTH: SEP

CATEGORY A: ANY CEILING OR VISIBILITY (HOURLY OBS ONLY)

••••••	• • • • • • •	•••••	•••••	• • • • • • • • • •	•••••	•••••	•••••	• • • • •		• • • • • •	• • • • •	•••••	• • • • • • • • •	• • • • • •	• • • • • •	••••
TIME (LST)		000	0 - 020	00		030	0 - 050	0		06	00 -	0800		09	00 - 11	00
SPEED (KTS)	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GE2	5 OBS	GE1	GE15	GB25	OBS
CATEGORY A	.1			810	.6	.2		815	.1	.1		823	• (.1		825
CATEGORY B	.3	.1		885	.9	.5		931	.3	.1		1002	1.0	5 .2		960
•••••	· • • • • • • • • • • • • • • • • • • •	•••••	•••••	• • • • • • • • • • • • • • • • • • • •					• • • • • • • • • • • • • • • • • • • •	• • • • •		•••••			• • • • • • •	••••
TIME (LST)		120	0 - 140	00		150	0 - 170	0		18	00 -	2000		21	00 - 23	00
SPEED (KTS)	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GE2	5 OBS	GE1	GE15	GB25	OBS
CATEGORY A	1.3	.1		825	.7	.2		821				810				810
CATEGORY B	2.6	.2		906	3.5	.7		912	.9	.2		880	•	7		878
••••••	• • • • • • •	•••••		• • • • • • • • • • • • • • • • • • • •		• • • • • •		• • • • •	• • • • • • • • •	• • • • •		•••••			•••••	••••
TIME (LST)	 I	•••••	•••••	• • • • • • • • • •		- 2000			*****	• • • • • •	ALL	Hours	• • • • • • • • •	• • • • • •	• • • • • •	••••
TIME (LST)					0800	- 2000	,				ALL	HOURS				
SPEED KTS				GE10	GE15	GE25	OBS		•	3E10	GB15	GE25	OBS			
CATEGORY A				.5	.1		4104			.4	.1		6539			
CATEGORY B				1.8	.3		4660			1.3	.3		7354			

PERCENTAGE FREQUENCY OF OCCURRENCE OF CROSSWINDS

FROM HOURLY OBSERVATIONS

MAGNETIC RUNWAY HEADING: 046-226 PERIOD OF RECORD: JAN 80 - DEC 89

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY

LST TO UTC: - 1 MONTH: OCT

CATEGORY A: ANY CEILING OR VISIBILITY (HOURLY OBS ONLY)

TIME (LST)		000	0 - 02	00		030	0 - 05	00		060	0 - 0	800		090	0 - 11	00
SPEED (KTS)	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS
CATEGORY A	1.1			905	.4			910	.9	.1		926	1.3	.3		930
CATEGORY B	3.0	1.2		1019	3.0	.5		1039	2.0	.6	.1	1106	3.7	.9	.1	1123
	• • • • • • •		•••••			• • • • •		• • • • •	• • • • • • • • • •	• • • • •	• • • • •				• • • • •	••••
TIME (LST)		120	0 - 14	00		150	0 - 17	00		180	0 - 2	000		210	0 - 23	00
SPRED (KTS)	GE10	GE15	GE25	OBS	GE10	GE15	GB25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GE25	овѕ
CATEGORY A	2.4	.3		930	1.7	.4		930	1.2	.4		930	.8			928
CATEGORY B	7.0	1.5	.1	1054	5.3	1.3	.1	1036	2.5	1.2	.3	1004	3.2	1.2		1020
	• • • • • • •			•••••						•••••	••••	•••••	• • • • • • • • • •			••••
•••••••	•••••	• • • • • •	• • • • • •	• • • • • • • • • •	• • • • • •	• • • • • •	•••••	• • • • • •	• • • • • • • • •	• • • • •	• • • • •	•••••		• • • • • • •	• • • • • •	••••
TIME (LST)					0600	- 2000)			1	TL	HOURS				
SPRED KTS				GE10	GE15	GE25	ОВ	s	d	E10 (E15	GE25	OBS			
CATEGORY A				1.5	.3		464			1.2	.2		7389			
CATEGORY B				4.1	1.1	.1	532	3		3.7	1.0	.1	8401			

PERCENTAGE FREQUENCY OF OCCURRENCE OF CROSSWINDS FROM HOURLY OBSERVATIONS

MAGNETIC RUNWAY HEADING: 046-226

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY PERIOD OF RECORD: JAN 80 ~ DEC 89

LST TO UTC: - 1 MONTH: NOV

CATEGORY A: ANY CEILING OR VISIBILITY (HOURLY OBS ONLY)

TIME (LST)		000	0 - 0200	0		030	0 - 05	00		06	ioo – (0800		090	0 - 11	00
SPRED (RTS)	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE10) GE15	GE2	5 OBS	GB10	GR15	GE25	OBS
CATEGORY A	.6	.1		870	.3	.1		871		,		877	.5	.1		885
CATEGORY B	2.9	.9		955	2.8	.4		1003	3.0	.4	,	1008	2.2	.3		1034
•••••••	• • • • • • • •	•••••	•••••	• • • • • • • •	• • • • • •		•••••	• • • • • •	• • • • • • • •	• • • • • •	••••	• • • • • • • • •	•••••	•••••	•••••	••••
TIME (LST)	:	120	0 - 1400	0		150	0 - 17	00		18	00 - 2	2000		210	0 - 23	00
SPEED (KTS)	GE10	GB15	GE25	OBS	GE10	GE15	GE25	OBS	GB1	GE15	GB2	5 OBS	GE10	GB15	GE25	овѕ
CATEGORY A	1.6	.1		885	2.4	.1		885	.9			871	.8			867
CATEGORY B	5.9	1.3		996	5.5	.9		988	3.7	8	1	956	2.3	.3	.1	946
	· • • • • • • •	•••••	•••••	• • • • • • •	• • • • • •					• • • • •				•••••	•••••	••••
TIME (LST)		•••••		•	0600	- 2000					ALL	HOURS	•	•••••	•••••	••••
SPEED KTS				GE10	GE15	GE25	OE	s			GE15	GB25	OBS			
				GE10				s					OBS			

TIME (LST)		0600	- 2000			ALL	HOURS	
SPEED KTS	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS
CATEGORY A	1.2	.1		4403	1.0	.1		7011
CATEGORY B	4.0	.7		4982	3.5	.7	.0	7886

PERCENTAGE FREQUENCY OF OCCURRENCE OF CROSSWINDS FROM HOURLY OBSERVATIONS

MAGNETIC RUNWAY HEADING: 046-226

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY

LST TO UTC: - 1

PERIOD OF RECORD: JAN 80 - DEC 89 MONTH: DEC

CATEGORY A: ANY CEILING OR VIS	LITY (BOURLY OBS ONLY)
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TIME (LST)		000	0 - 02	00		030	0 - 05	00		060	0 - 0	800		090	0 - 11	.00
SPEED (KTS)	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS
CATEGORY A	2.8	.7		880	3.2	.8		886	2.5	.6		892	2.0	.4		903
CATEGORY B	4.9	1.7	.3	997	5.5	2.4	.5	1042	4.9	1.9	.3	1070	5.4	1.5	.3	1097
	• • • • • •	•••••	•••••	•••••	•••••	•••••	•••••	• • • • • •	•••••	• • • • • •	• • • • •		• • • • • • • • • •	• • • • • •	•••••	
TIME (LST)		120	0 - 14	00		150	0 - 17	00		180	00 - 2	000		210	0 - 23	00
SPEED (RTS)	GE10	GE15	GE25	OBS	GE10	GE15	GB25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GE 25	OBS
CATEGORY A	2.7			904	2.3	.3		900	2.9	.8		870	2.1	.7		870
CATEGORY B	6.3	1.4	.2	1050	7.1	2.6	.2	1035	6.4	3.7	.7	994	4.5	2.1	.9	1005
	•••••	•••••	•••••	•••••		•••••		• • • • •	•••••	• • • • •	• • • • •	• • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • •	•••••	••••
mr.m. (******	•••••	******	•••••	********	0600	- 2000		• • • • • •	******				•	• • • • • •	•••••	••••
TIME (LST)					0000	- 2000	,				ILL	HOURS				
SPEED KTS				GB10	GE15	GE25	ОВ	S	•	E10 (E15	GE25	OBS			
CATEGORY A				2.5	.4		446	9		2.5	.5		7105			
CATEGORY B				6.0	2.2	.3	525	6		5.6	2.1	.4	8300			

PERCENTAGE FREQUENCY OF OCCURRENCE OF CROSSWINDS FROM HOURLY OBSERVATIONS

MAGNETIC RUNWAY HEADING: 046-226

PERIOD OF RECORD: JAN 80 - DEC 89

STATION NUMBER: 106070 STATION NAME: SPANDAHLEM AB/GERMANY

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LST TO UTC: - 1 MONTH: ALL

CATEGORY A: ANY CEILING OR VISIBILITY (HOURLY OBS ONLY)

TIME (LST)		000	0 - 02	100		030	0 - 050	0		060	0 - 0	800		090	00 - 11	.00
SPEED (KTS)	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE1	0 GE15	GE25	OBS
CATEGORY A	.8	.1		10568	.8	.1	1	.0589	.7	.1		10646	1.	4 .1		10671
CATEGORY B	2.1	.7	.0	11507	2.2	.6	.1 1	2017	2.1	.5	.0	12408	4.	1 .8	.0	12306
	· • • • • • • •	• • • • • •	•••••					•••••	• • • • • • • • • • • • • • • • • • • •	•••••			• • • • • • • • • • • • • • • • • • • •		• • • • •	
TIME (LST)		120	0 - 14	100		150	00 - 170	00		180	00 - 2	000		210	00 - 23	100
SPEED (KTS)	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GE10	GE15	GE25	OBS	GR1	0 GE15	GE25	OBS
CATEGORY A	2.7	.1		10672	2.5	.2	1	.0664	1.3	.2	.0	10600	•	9 .2		10588
CATEGORY B	7.0	1.5	.1	12033	6.6	1.6	.1 1	.1889	3.4	1.2	.2	11526	2.	3 .8	.1	11481
	 . • • • • • •							• • • • •					• • • • • • • • • • • • • • • • • • • •	•••••		
• • • • • • • • • • • • • • • • • • • •	• • • • • • •	• • • • • •	•••••			•••••	•••••	•••••	• • • • • • • • •	• • • • • •	• • • • •	•••••	• • • • • • • • •	•••••	• • • • • •	
TIME (LST)					0600	- 2000)			1	ALL	HOURS				
SPEED KTS				GE10	GE15	GE25	OBS	3	ď	3810 (3E15	GE25	OBS			
CATEGORY A	!			1.7	.1	.0	53253	1		1.4	.1	.0	84998			
CATEGORY B				4.6	1.1	.1	60162	?		3.7	1.0	.1	95167			

PPPPP	PPP	λλλ	λλλ	RRRR	RRRR	TTTTTTTTT	HH	HH
PPPPP	PPPP	AAAA	AAAA	RRRR	RRRRR	THE PERSON NAMED IN THE PE	HH	HH
PP	PP	λλ	λλ	RR	RR	TT	HH	HH
PP	PP	λλ	AA	RR	RR	TT	HH	HH
PPPPP	PPPP	λλ	λλ	RRRR	RRRRR	TT	HHHHH	HHHHH
PPPPP	PPP	AAAAA	AAAAA	RRRR	RRRR	w	HHHH	HHHH
PP		AAAAA	AAAAA	RR	RR	TT	HH	HH
PP		λλ	λλ	RR	RR	TT	HH	HH
PP		AA	λλ	RR	RR	TT	HH	HH
PP		Aλ	λλ	RR	RR	TT	EH	HH

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PART B

DEGREE DAY SUMMARIES

DEGREE DAYS

CREATED FROM HOURLY OBSERVATIONS (MAX+MIN/2 WHEN AVAILABLE), THESE TABLES GIVE THE THE NUMBER OF DEGREE DAYS FOR EACH MONTH IN EACH YEAR OF THE AVAILABLE PERIOD OF RECORD.

INCLUDED BENEATH EACH SUMMARY ARE STATISTICS BASED ON A 30-YEAR (1951-1980) POR (IF AVAILABLE). THE 30-YEAR POR PROVIDES AWS USERS WITH A SUMMARY CONSISTENT WITH OTHER STANDARD CLIMATIC PUBLICATIONS, NOTABLY THOSE OF THE NATIONAL CLIMATIC DATA CENTER (NCDC). NOTE THAT THE 30-YEAR POR WILL CHANGE TO 1961-1990 AS SOON AS DATA FOR DECEMBER 1990 HAS BEEN PROCESSED.

MONTHS WITH NO AVAILABLE DATA AND MONTHS WITH A VALUE OF ZERO APPEAR AS BLANKS IN THESE TABLES. ASTERISKS (****) DENOTE AN INCOMPLETE MONTH WITH A DAY (OR DAYS) THAT CANNOT BE CALCULATED (FILLED IN) AUTOMATICALLY.

HEATING DEGREE DAYS.

ONE "HEATING DEGREE DAY" IS ASSIGNED TO REPRESENT EACH DEGREE THAT THE MEAN TEMPERATURE FALLS BELOW A DESIGNATED "BASE TEMPERATURE" OF 65 DEGREES* FAHRENHEIT. FOR EXAMPLE, IF THE MEAN TEMPERATURE ON A GIVEN DAY IS 57 DEGREES, THAT DAY IS SAID TO HAVE 8 HEATING DEGREE DAYS.

COOLING DEGREE DAYS.

ONE "COOLING DEGREE DAY" IS ASSIGNED TO REPRESENT EACH DEGREE THAT THE TEMPERATURE RISES ABOVE A DESIGNATED "BASE TEMPERATURE" OF 65 DEGREES* FAHRENHEIT. FOR EXAMPLE, IF THE MEAN TEMPERATURE FOR A GIVEN DAY IS 73 DEGREES, THAT DAY IS SAID TO HAVE 8 COOLING DEGREE DAYS.

*65 DEGREES FAHRENHEIT HAS BEEN SELECTED AS THE NATIONWIDE STANDARD
"BASE TEMPERATURE" AT WHICH (AT LEAST THEORETICALLY) NO HEATING OR
COOLING IS REQUIRED. IF ANOTHER BASE TEMPERATURE IS USED IN THESE
TABLES, IT WAS SPECIALLY REQUESTED BY THE STATION, AND IS NOTED.

NOTE 1. THESE SUMMARIES ARE NOT AVAILABLE FOR PART TIME PERIODS.

HEATING DEGREE DAYS FROM BOURLY OBSERVATIONS

BASE TEMPERATURE 65

STATION	NUM	BER: 106		TATION N	-	NDAHLEM 1	AB/GERMAI	ľY		PEF	CIOD OF	RECORD:	JAN 68	- DEC 89
YEARS	ï	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	nna
1968	··i·	1071	897	751	476	429	208	165	162	289	442	***	****	4890
1969	- 1	***	972	814	****	****	***	***	***	***	***	***	1150	2936
1970	l	1018	891	902	****	324	***	160	60	160	477	621	950	5563
1973	1	967	859	724	644	283	97	79	32	191	512	780	953	6121
1974	ı	814	756	716	507	431	276	207	90	283	722	747	758	6307
1975	1	754	752	815	613	397	213	87	42	162	580	787	979	6181
1976	ı	909	885	895	607	341	90	70	74	256	363	646	1039	6175
1977	- 1	905	617	634	666	381	177	128	130	318	415	681	855	5907
1978	- 1	946	904	707	617	399	264	195	147	292	514	812	896	6693
1979		1238	901	777	616	401	150	147	224	263	433	759	784	6693
1980	Ì	1036	727	742	604	395	248	232	129	235	579	805	989	6721
1981	1	1024	950	635	546	346	213	136	138	229	571	710	1026	6524
1982	- 1	1064	830	740	582	300	144	55	96	115	490	647	886	5949
1983	- 1	843	956	748	543	470	149	31	57	260	515	780	932	6284
1984	-	926	889	829	616	475	264	***		***	***	***	***	3999
1985	ı	1197	979	798	474	263	258	68	143	192	446	***	****	4818
1986	1	***	1103	774	675	257	155	81	86	285	364	***	861	4641
1987		1216	883	946	489	514	271	106	134	136	492	764	****	5951
1988	- 1	841	828	776	514	238	160	119	60	199	363	***	***	4098
1989	.	864	786	557	536	207	189	87	87	204	424	754	****	4695
MEAN	1	979	868	764	573	360	195	119	105	226	483	735	932	
SD		140.65	106.69	93.26	64.45	86.53	59.41	56.01	49.32	59.16	91.75	63.07	103.99	

COOLING DEGREE DAYS FROM HOURLY OBSERVATIONS

BASE TEMPERATURE 65

STATION NUMBER: 106070

STATION NAME: SPANDAHLEM AB/GERMANY

PERIOD OF RECORD: JAN 68 - DEC 89

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Years	1	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ann
1968	ï	•••••	• • • • • • • •	• • • • • • •	5	•••••	10	34	3	• • • • • • • •	•••••	****	****	52
1970	ļ				****		***	29	59	3				91
1973	ı						37	58	118	65				278
1974	ł							7	48	8				63
1975	ı						12	29	109	3				153
1976	i					13	121	142	20		2			298
1977							8	48	5					61
1978							5	40	13					58
1979	- }					8	17	11	5	1	2			44
1980	l						9	21	23					53
1981	1					4	8	12	41					65
1982						10	60	105	19	12				206
1983							10	163	83					256
1984	- 1					_	2	****		***	***	***	***	2
1985	ı					6	11	51	21	9	5	****	***	103
1986	1	****				1	104	64	69	1		***		239
1987							20	31	33	46			***	130
1988						5	7	26	71	1		****	***	110
1989						12	12	65	55	3			***	147
MEAN	i				0	3	25	52	44	8	0			
						,	43			•	v			
SD	- 1				1.18	4.54	34.82	43.73	35.08	17.78	1.29			

A W S STATION NAME: SPANGDAHLEM AB GERMANY

CLIMATIC BRIEF HOURLY OBS POR: JAN 80 - DEC 89 006 42 E

SUMMARY OF DAY POR: MAY 53-FEB 90

HOURS SUMMARIZED: 0000 - 2300 LST

NOV 90 LST TO UTC: -01 FIELD BLEV: 1196 PT STATION MSC: 106070 CALL SIGN: EDAD

SUPERSEDES: AUG 84

NOV 90 LST 10 01	NOV 90 LEST TO UTC: -01												1		
MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	YOR	i
EXTRM MAX TEMP (F) MEAN MAX TEMP (F)	54 36	63 39	73 46	81 53	87 61	90 67	94 70	95 70	87 65	79 55	66 44	59 38	95 54	38 38	ĺ
MEAN TEMP (F) MEAN MIN TEMP (F) EXTRM MIN TEMP (F)	33 29 -3	34 29 -3	40 33 9	46 38 21	53 45 28	59 51 35	62 54 39	62 53 38	57 49 34	49 43 25	40 35 16	35 31 5	48 41 -3	38 38 38	
D/W TEMP GE 80 (F) D/W TEMP GE 70 (F) D/W TEMP LT 33 (F)	0 0 20	0 0 18	0 1 13	# 1 5	1 6 1	2 11 0	5 16 0	4 15 0	1 8 0	0 1 1	0 0 10	0 0 17	13 59 85	38 38 38	ĺ
D/W TEMP LT 20 (F)	5	4	1	0	ō	ŏ	0	ő	ő	ō	1	2	13	38	
HEATING DEGREE DAYS COOLING DEGREE DAYS	979 0	868 0	764 0	573 #	360 3	195 25	119 52	105 44	226 8	483 #	735 0	932 0	6339 132	22 22	İ
MEAN DEWPOINT TEMP (F) MEAN WET BULB TEMP (F) 99.95% WCPA (FT)	27 30 2150	25 30 2100	31 36 2050	35 40 1850	43 48 1800	49 53 1600	52 57 1550	52 56 1500	49 53 1600	42 45 1950	34 37 1900	31 34 2250	39 43 1900	10 10 10	
MEAN REL HUM 07 LST(%) MEAN REL HUM 13 LST(%)	81.3 78.1	76.4 68.7	80.7 68.0	77.6 59.0	80.6 60.0	83.2 61.6	83.0 59.4	84.4 58.7	85.4 63.7	84.3 72.0	84.3 77.8	82.9 80.0	82.0 67.3	10 10	İ
MAX 24HR PRECIP (IN) MAX PRECIP (IN) MEAN PRECIP (IN) MIN PRECIP (IN) D/W PRECIP GE .01 (IN) D/W PRECIP GT .50 (IN)	1.77 4.94 2.53 .83 18	1.15 5.19 2.07 .13 13	1.26 4.39 1.98 .37 14	1.63 3.72 1.60 .42 12	1.42 6.45 2.48 .74 14	1.67 4.91 2.56 .11 13	1.81 6.25 2.61 .63 13	1.44 6.16 2.26 .40 13	1.35 5.52 2.18 .10 11	1.59 5.43 2.15 .38	2.96 5.02 2.44 .21 15	1.71 6.25 2.68 .15 16	2.96 37.23 27.49 17.17 165 12	36 38 38 36 38 38	
MAX 24HR SNFL (IN) MAX SNFL (IN) MEAN SNFL (IN) D/W SNFL GE .1 (IN) D/W SNFL GE 1.5 (IN)	7.1 24.0 7.0 7	7.2 25.1 5.7 5	4.8 16.1 3.1 4 1	15.1 21.0 1.5 1	2.0 2.0 .1	# # 0 0	0 0 0 0	0 0 0 0	# # 0 0	.3 .3 # #	5.1 12.7 2.2 2	11.9 15.9 4.1 5	15.1 60.4 22.1 24 6	38 38 38 38 38	
MAX DLY SNO DEPTH (IN)	12	14	8	12	1	0	0	0	0	0	6	11	14	38	i
PRVLNG WND DIR (DEG) MEAN WND SPD (RTS) MAX WND SPD (RTS)	23-25 6 90	05-07 6 81	23-25 6 46	\$05-07 5 41	\$23-25 4 38	23-25 4 40	23-25 4 50	\$23-25 4 36	\$23-25 4 44	23-25 5 48	23-25 5 51	23-25 5 60	23-25 5 90	10 10 38	
SKY COVER OT 5/10 (%) D/W THUNDERSTORMS D/W POG (VSBY LT 7 MI)	1 23	* 1 19	* 1 19	* 1 16	# 4 16	* 5 17	* 5 17	# 4 19	2 21	1 24	* 1 23	* 1 23	* 27 237	* 38 38	İ
1 7 moreon . 2 mm _ 2 mm ra 7							//				• • • • • • •	• • • • • •	• • • • • •		i

LEGEND: ANN - ANNUAL

D/W = MEAN NUMBER OF DAYS WITH

= DATA NOT AVAILABLE

= LESS THAN 0.5 DAYS OR TRACE AS APPLICABLE

\$ = PERCENTAGE OF CALM WINDS GREATER THAN OR EQUAL TO MEAN

PERCENT OCCURRENCE FREQUENCY OF CEILING AND VISIBILITY															
) H	ONTH	JAN	FEB	MAR	APR	MAY	JUN	lar	AUG	SEP	OCT	NOA	DEC	Ann	YOR
1	LST	l	i	i		1	i			i	i	i · · · · · ·		i	i
	00 - 02	70.5	47.5	42.4	24.1	18.7	16.3	12.9	14.2	24.2	43.2	53.3	65.2	36.0	10
	03 - 05	70.7	52.8	52.3	33.2	29.6	31.1	23.3	24.3	36.1	56.3	62.5	67.2	44.9	10
CIG	06 - 08	71.8	57.4	64.4	42.6	36.0	39.7	32.3	36.8	48.1	63.8	62.5	69.6	52.1	10
LT 3000 FT	09 - 11	72.6	58.5	60.3	37.9	33.1	33.6	25.3	27.8	42.9	62.4	61.5	70.3	48.8	10
AND/OR	12 - 14	68.9	51.9	50.6	30.0	26.0	22.9	17.6	16.5	25.3	45.5	54.2	69.1	39.9	10
VSBY	15 - 17	64.5	47.2	42.5	24.4	16.5	14.3	11.1	10.4	15.5	33.2	44.2	63.4	32.3	10
LT 3 MI	18 - 20	62.4	46.3	33.4	19.7	13.0	10.3	8.2	8.2	14.8	30.1	44.5	61.6	29.4	10
	21 - 23	64.4	46.2	33.3	18.4	12.8	11.6	9.8	8.2	17.4	33.8	48.3	66.1	30.9	10
	ALL	68.2	51.0	47.4	28.8	23.2	22.5	17.6	18.3	28.1	46.0	53.9	66.6	39.5	10
1	00 - 02	i 55.5	36.3	27.6	15.8	12.7	11.0	8.7	11.5	16.9	32.8	42.9	l 50.7	26.9	10 l
	03 - 05	58.4	38.5	37.0	23.7	22.0	24.1	16.4	19.8	29.1	43.7	51.4	54.5	34.9	10
CIG	06 - 08	58.2	43.3	48.1	33.0	25.3	30.6	24.4	29.7	38.8	51.6	50.7	55.4	40.8	10
LT 1500 FT	09 - 11	57.8	45.7	43.3	22.4	16.1	19.2	14.1	16.5	29.6	47.8	48.5	56.0	34.7	10
AND/OR	12 - 14	52.4	36.6	27.5	14.6	8.2	7.3	5.4	6.7	12.1	27.3	38.5	52.5	24.1	10
VSBY	15 - 17	44.6	30.0	19.0	11.7	4.5	4.7	3.4	3.6	8.3	19.0	29.3	46.3	18.7	10
LT 3 MI	18 - 20	44.6	30.2	17.3	12.0	5.6	4.3	3.2	4.7	8.1	18.4	30.9	46.1	18.8	10
ł	21 - 23	47.7	34.3	20.2	11.3	7.2	5.7	5.9	5.6	9.1	23.7	35.9	50.0	21.4	10
	ALL	52.4	36.9	30.0	18.1	12.7	13.4	10.2	12.3	19.0	33.0	41.0	51.5	27.7	10
1	00 - 02	42.9	26.0	16.1	9.5	6.5	6.6	6.7	7.5	10.7	21.7	32.2	41.4	19.0	10
	03 - 05	46.1	26.9	25.2	15.6	14.2	16.1	10.4	14.5	20.4	31.8	39.3	46.3	25.6	10
CIG	06 - 08	45.2	30.7	34.7	21.1	15.1	21.6	15.3	21.6	31.1	41.5	41.8	47.6	30.6	10
LT 1000 FT	09 - 11	45.7	34.0	28.8	12.9	6.9	9.9	7.2	9.2	19.0	36.0	38.6	44.3	24.4	10
AND/OR	12 - 14	38.7	23.9	14.4	7.3	2.8	3.3	2.8	2.7	6.7	18.4	28.8	39.9	15.8	10
VSBY	15 - 17	32.5	17.8	8.5	4.6	.9	2.1	1.9	1.3	5.0	10.9	21.9	37.2	12.0	10
LT 2 MI	18 - 20	33.4	20.5	9.9	6.8	1.4	1.8	1.8	1.3	5.3	11.4	23.9	36.7	12.8	10
	21 - 23	37.0	23.4	11.2	6.7	3.1	2.9	4.1	3.0	5.9	13.7	29.3	38.7	14.9	10
1	ALL	40.2	25.4	18.6	10.5	6.3	8.0	6.2	7.6	13.0	23.1	32.0	41.5	19.5	10
i	l 00 - 02	11.6	6.4	1.3	1.4	.6	1.0	.6	1.8	2.5	5.1	10.5	 13.1	4.7	l 10 l
J	03 - 05	15.2	7.8	2.7	1.2	2.2	3.1	1.4	4.4	7.4	8.9	11.6	13.8	6.6	10
CIG	06 - 08	14.5	9.2	5.7	3.7	1.6	3.0	1.9	5.9	10.0	13.4	14.5	14.8	8.2	10
LT 200 PT	09 - 11	12.9	7.8	4.2	.8	.3	.6	.0	.6	3.2	10.5	13.2	17.3	5.9	10
AND/OR	12 - 14	9.2	6.1	1.4	.4	.0	.0	.0		.0	1.9	6.2	11.9	3.1	10
VSBY	15 - 17	6.5	4.9	1.0	.3	.0	.0			.0	.5	5.5	10.8	2.5	10
LT 1/2 MI	18 - 20	7.4	4.4	.6	.3	.0	.0	.0	.1	.0	.9	4.6	11.6	2.5	10
1	21 - 23	8.1	5.4	.4	.6	.3	.0	.4	.1	1.0	2.7	8.1	11.5	3.2	10
	ALL	10.7	6.5	2.2	1.1	.6	1.0	.5	1.6	3.0	5.5	9.3	13.1	4.6	10
•	•		•	•	,	•	•	•							

HURRICAMES/TROPICAL STORMS OBSERVED : NONE

REMARKS : 0

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